Year: 2005, Region: MECS (Emissions By Plant)

NOx SO2 MER CO2 Carbon

Generation Trillion
Emission Emission Emission Emission Emission
(lb/MBtu)(lb/TBtu)(MW) $
/KWyr VOM Mill/KWh (GWh) (Btu)
(1000 Tons) (1000 Tons) (Tons) (Mil Tonnes)(Mil Tonnes)
Unit Fuel NOx SO2 MERCURY Cap. Cap
. FO&M WINT. SUMM. WINTER SUMMER Total WINTER SUMMER Total
WINTER SUMMER Total Total Total Total Total Total
Scrubbed Coal_NOx 1
MECS TCOLE0411391030308 01 BD1: 5.1 0.60 0.33 0.25 20. 0.
43.30 2.85 3.85 83. 66. 149. 0.86 0.69 1.55
0.259 0.134 0.393 0.258 0.000 0.144 0.039
Scrubbed Coal 2
MECS TSXBS0432392020103 01 BD1: 5.1 0.30 0.07 1.72 65. 0.
35.60 2.94 2.94 270. 179. 449. 2.97 1.98 4.95
0.446 0.296 0.742 0.178 0.004 0.461 0.126
MECS TSXBS0432392020203 01 BD1: 5.1 0.33 0.12 2.94 50. 0.
35.60 2.94 2.94 174. 106. 280. 2.03 1.24 3.27
0.336 0.205 0.540 0.199 0.005 0.305 0.083
Unscrubbed Coal_NOx 3
MECS TSJBO0412392020202 01 BB2: 4.1 0.37 1.00 3.69 20. 0.
32.30 0.54 1.54 83. 66. 149. 0.92 0.73 1.66
0.170 0.088 0.259 0.829 0.003 0.154 0.042
MECSMITSFSC0441392020101 01 SB1: 4.5 0.35 1.00 4.41 3000. 0.
27.00 1.51 2.51 12450. 9888. 22339. 114.47 90.91 205.38
20.318 1.636 21.955 102.692 0.453 19.815 5.404
Unscrubbed Coal 4
MECS TCOLU0411392050710 01 BB2: 4.1 0.40 1.00 4.10 22. 0.
31.80 1.54 1.54 91. 73. 164. 0.95 0.75 1.70
0.189 0.150 0.339 0.850 0.003 0.158 0.043
MECS TCOLU0431152020110 01 SB2: 6.5 0.46 1.00 6.29 45. 0.
32.00 1.54 0.00 33. 0. 33. 0.35 0.00 0.35
0.080 0.000 0.080 0.173 0.001 0.033 0.009
MECS TCOLU0431392020110 01 BB2: 4.1 0.40 1.00 2.62 253. 0.
32.00 1.54 1.54 880. 536. 1416. 9.15 5.57 14.72
1.829 1.115 2.944 7.361 0.019 1.371 0.374
MECS TSASU0441392020110 01 SB1: 4.5 0.26 0.67 4.41 1260. 0.
17.40 1.54 1.54 5229. 4153. 9382. 51.48 40.88 92.36
6.615 5.254 11.868 30.802 0.204 8.911 2.430
MECS TSBBU0441392020110 01 BB2: 4.1 0.36 1.00 2.62 500. 0.
32.00 1.54 1.54 2075. 1648. 3723. 18.96 15.06 34.02
3.385 2.688 6.073 17.011 0.045 3.168 0.864
MECS TSBSU0441392020110 01 SB1: 4.5 0.31 1.00 4.41 1894. 0.
29.20 1.54 1.54 7860. 5229. 13090. 75.92 50.51 126.42
11.881 7.904 19.785 63.211 0.279 12.197 3.326
MECS TSDBU0441392020110 01 BB2: 4.1 0.46 1.00 2.62 609. 0.
32.00 1.54 1.54 2527. 1681. 4209. 23.74 15.79 39.53
5.520 3.672 9.192 19.767 0.052 3.682 1.004
MECS TSEBU0441392020110 01 BB2: 4.1 0.30 1.00 2.62 320. 0.
32.00 1.54 1.54 1328. 884. 2212. 13.06 8.69 21.76
1.960 1.304 3.263 10.878 0.029 2.026 0.553

```
  MECSMITSGBU0431392020110 01                BB2: 4.1 0.41  1.00  2.62   190.   0.
  32.00  1.54  1.54      789.       403.      1191.     7.92     4.04    11.96
   1.640    0.837    2.477       5.982       0.016         1.114         0.304
  MECSMITSGBU0432391050210 01                BB2: 4.1 0.55  1.00  4.10    27.   0.
  26.40  1.54  0.00       72.         0.        72.     0.90     0.00     0.90
   0.246    0.000    0.246       0.450       0.002         0.084         0.023
  MECSMITSGBU0441392020110 01                BB2: 4.1 0.36  1.00  2.62   945.   0.
  32.00  1.54  1.54     3922.      2609.      6531.    37.66    25.06    62.72
   6.854    4.560   11.415      31.359       0.082         5.840         1.593
  MECS  TSIBU0432392020110 01                BB1: 3.4 0.30  1.00  2.18    53.   0.
  32.00  1.54  1.54        0.        61.        61.     0.00     0.67     0.67
   0.000    0.102    0.102       0.336       0.001         0.063         0.017
  MECS  TSIBU0432392020110 01                BB2: 4.1 0.30  1.00  2.62    53.   0.
  32.00  1.54  1.54      184.        51.       235.     2.02     0.56     2.58
   0.306    0.085    0.391       1.290       0.003         0.240         0.066
  MECS  TSIBU0441392020110 01                BB2: 4.1 0.43  1.00  2.62   103.   0.
  26.40  1.54  1.54      427.       218.       646.     4.39     2.24     6.64
   0.947    0.483    1.430       3.318       0.009         0.618         0.169
  MECS  TSIBU0442392020110 01                BB2: 4.1 0.30  1.00  2.62   236.   0.
  32.00  1.54  1.54      630.       500.      1130.     7.33     5.82    13.15
   1.099    0.873    1.973       6.576       0.017         1.225         0.334
  MECS  TSKBU0412391020710 01                BB2: 4.1 0.81  1.00  4.10    21.   0.
  32.00  1.54  1.54       87.        69.       156.     1.09     0.87     1.95
   0.443    0.352    0.795       0.977       0.004         0.182         0.050
  MECS  TSKBU0412391050710 01                BB2: 4.1 1.67  1.00  4.10    15.   0.
  26.40  1.54  1.54       62.        49.       112.     0.75     0.59     1.34
   0.625    0.497    1.122       0.670       0.003         0.125         0.034
  MECSMITSLBU0441152020110 01                BB1: 3.4 0.44  1.00  2.18   156.   0.
  26.40  1.54  0.00      227.         0.       227.     2.19     0.00     2.19
   0.484    0.000    0.484       1.094       0.002         0.204         0.056
  MECSMITSLBU0441152020110 01                BB2: 4.1 0.44  1.00  2.62   156.   0.
  26.40  1.54  0.00      189.         0.       189.     1.82     0.00     1.82
   0.403    0.000    0.403       0.912       0.002         0.170         0.046
Oil/Gas Steam                    5
  MECS  STHSU0421   000000 00                GAS      0.20  0.00  0.00  1035.   0.
  17.10  2.57  2.57     1053.       570.      1623.    10.10     5.46    15.56
   1.005    0.544    1.548       0.000       0.000         0.826         0.225
Oil/Gas Steam_Nox                6
Nuclear                          7
  MECS  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   767.   0.
 179.20  0.80  0.80     3610.      1428.      5038.    37.43    14.80    52.23
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MECS  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1110.   0.
 109.80  0.75  0.75     4585.      4056.      8641.    59.00    52.19   111.19
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  MECS  HYDRO00     000000 00                HYDRO    0.00  0.00  0.00   158.   0.
  15.40  0.00  0.00      618.       395.      1013.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  MECS  CC   0422   000000 00                GAS      0.02  0.00  0.00  1456.   0.
  13.90  1.03  1.03      235.       750.       984.     1.76     5.62     7.38
   0.018    0.056    0.074       0.000       0.000         0.392         0.107
IGCC                            10
Turbine                         11
  MECS  CT   0411   000000 00                GAS      0.11  0.00  0.00     9.   0.
  11.20  0.00  1.03        0.         2.         2.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
Biomass                         12
  MECS  BIOMS00  42 000000 00                B1-: 0.6 0.02  0.08  0.57   161.   0.
  44.80  5.36  5.36      698.       539.      1237.     6.44     4.97    11.41
   0.064    0.050    0.114       0.456       0.003         0.000         0.000
Geothermal                      13
Landfill Gas                    14
  MECS  LFGAS00     000000 00                WASTE    0.25  0.00  0.00     5.   0.
```

```
  78.60 10.48 10.48       22.        17.        39.     0.31     0.23     0.54
   0.038    0.029    0.066       0.000       0.000         0.000         0.000
Wind                           15
  MECS  WIND 00     000000 00              NONE     0.00  0.00 71.00     1.   0.
  26.40  0.00  0.00        2.         1.         2.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  MECS  OTHER00     000000 00              NONE     0.00  0.00  0.00    18.   0.
 103.60  0.00  0.00       79.        63.       142.     0.87     0.69     1.56
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MECS  OTHER00     000000 00              NONE     0.00  0.00 71.00    15.   0.
 103.60  0.00  0.00       66.        52.       118.     0.73     0.57     1.30
   0.000    0.000    0.000       0.000       0.046         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
  MECS  PUMPS00     000000 00              NONE     0.00  0.00 71.00  1872.   0.
   6.50  0.00  0.00      387.       279.       666.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
  MECS  MIIMP00     000000 00              NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00     6553.      4730.     11283.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                       22
  MECS  CGCOU0431392050710 01            BB1: 3.4 0.40  1.00  3.41    55.   0.
  11.70  1.54  1.54        0.        46.        46.     0.00     0.48     0.48
   0.000    0.098    0.098       0.242       0.001         0.045         0.012
  MECS  CGCOU0431392050710 01            BB2: 4.1 0.40  1.00  4.10    55.   0.
  11.70  1.54  1.54      186.        69.       255.     1.94     0.72     2.66
   0.392    0.145    0.537       1.328       0.005         0.247         0.067
Cgn_Gas                        23
  MECS  CGCC 0413   000000 00              GAS      0.18  0.00  0.00    57.   0.
  13.90  0.00  1.03        0.        10.        10.     0.00     0.09     0.09
   0.000    0.008    0.008       0.000       0.000         0.005         0.001
  MECS  CGCC 0421   000000 00              GAS      0.18  0.00  0.00   738.   0.
  13.90  1.03  1.03      496.       380.       876.     3.43     2.63     6.05
   0.308    0.236    0.545       0.000       0.000         0.321         0.088
  MECS  CGCC 0422   000000 00              GAS      0.05  0.00  0.00   724.   0.
  13.90  0.00  1.03        0.       124.       124.     0.00     0.96     0.96
   0.000    0.026    0.026       0.000       0.000         0.051         0.014
Cgn_Oil                        24
Cgn_Other                      25
  MECS  CGBIO00  42 000000 00            B1-: 0.6 0.02  0.08  0.57    19.   0.
  44.80  5.36  5.36       82.        64.       146.     0.70     0.54     1.25
   0.007    0.005    0.012       0.050       0.000         0.000         0.000
  MECS  CGOTH00     000000 00              NONE     0.00  0.00 71.00    54.   0.
 103.60  0.00  0.00      234.       181.       415.     0.98     0.76     1.74
   0.000    0.000    0.000       0.000       0.062         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  MECS  TSABU0441391020110 01     SCR2   BB2: 4.1 0.56  1.00  2.62   790.   6.
```

```
  17.70  1.54  2.39     3279.      2604.      5883.    30.52    24.24    54.76
   8.622    0.679    9.301      27.381       0.072         5.100         1.391
Ret.ExistScrub & SCR          41
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2005, Region: ECAO     (Emissions By Plant)
--------------------------------------------------
```

| | NOx | | | SO2 | | MER | | CO2 | | Carbon | | |

36.20 2.91 3.91 2075. 1648. 3723. 21.59 17.14 38.73
5.138 0.411 5.549 4.841 0.036 3.607 0.984
ECAOOHTSYBA0441041020105 01 BG1: 8.0 0.58 0.25 2.73 2600. 0.
43.30 2.91 3.91 0. 1472. 1472. 0.00 14.05 14.05
0.000 0.407 0.407 1.756 0.006 1.308 0.357
ECAOOHTSYBA0441041020105 01 BG2:17.4 0.58 0.25 5.93 2600. 0.
43.30 2.91 3.91 10790. 7098. 17889. 103.03 67.77 170.80
29.981 1.965 31.946 21.350 0.364 15.905 4.338
ECAO TSXBA0641202020105 01 BG1: 8.0 0.44 0.25 2.73 1717. 0.
33.00 2.91 3.91 7126. 5659. 12785. 72.03 57.21 129.23
15.774 1.259 17.033 16.154 0.121 12.035 3.282
ECAO TSXBA0641202020205 01 BG1: 8.0 0.34 0.25 4.66 600. 0.
36.20 2.91 3.91 2490. 1978. 4468. 24.76 19.67 44.43
4.259 0.334 4.594 5.554 0.066 4.138 1.128
ECAO TSZBA0641051020105 01 BG1: 8.0 0.50 0.25 2.73 1920. 0.
43.30 2.91 3.91 999. 6329. 7327. 9.45 59.92 69.37
2.364 1.498 3.862 8.672 0.037 6.460 1.762
ECAO TSZBA0641051020105 01 BF2:11.1 0.50 0.15 3.77 1920. 0.
43.30 2.91 3.91 6970. 0. 6970. 65.99 0.00 65.99
16.497 0.000 16.497 4.949 0.124 6.145 1.676
ECAO TCOLA0641202020105 01 BG1: 8.0 0.11 0.25 2.73 268. 0.
23.60 2.91 3.91 1112. 883. 1996. 10.01 7.95 17.96
0.551 0.044 0.594 2.245 0.017 1.673 0.456
ECAO TSXBE0232041020207 01 BF2:11.1 0.61 0.24 6.43 194. 0.
43.30 2.85 3.85 805. 536. 1341. 9.82 6.53 16.35
2.975 1.287 4.262 1.937 0.053 1.522 0.415
ECAO TSXBE0242041020207 01 BF2:11.1 0.59 0.24 6.43 109. 0.
43.30 2.85 3.85 452. 359. 812. 4.91 3.90 8.82
1.450 0.747 2.197 1.071 0.028 0.821 0.224
ECAO TSVBA0641201010105 01 BG1: 8.0 0.74 0.25 3.70 141. 0.
43.50 2.91 3.91 585. 465. 1050. 5.86 4.66 10.52
2.178 0.172 2.350 1.315 0.013 0.979 0.267
ECAOINTSVBA0441181020105 01 BG1: 8.0 0.52 0.25 2.73 619. 0.
36.20 2.91 3.91 2569. 2040. 4609. 25.98 20.63 46.61
6.690 0.526 7.216 5.827 0.044 4.341 1.184
ECAOINTSVBA0441182020105 01 BG1: 8.0 0.44 0.25 2.73 865. 0.
36.80 2.91 3.91 3590. 2851. 6441. 35.86 28.48 64.33
7.924 0.627 8.551 8.042 0.060 5.991 1.634
Scrubbed Coal 2
ECAO TCOLS0231411020703 01 BF3:18.7 0.80 0.36 8.41 176. 0.
43.00 2.94 2.94 730. 373. 1103. 7.60 3.88 11.47
3.039 1.551 4.590 2.065 0.048 1.069 0.291
ECAO TCOLS0611182020703 01 BG1: 8.0 0.46 0.90 4.66 53. 0.
43.00 2.94 2.94 220. 175. 395. 2.29 1.82 4.10
0.526 0.418 0.944 1.847 0.010 0.382 0.104
ECAO TCOLS0631041050303 01 BF2:11.1 0.55 0.72 0.33 84. 0.
23.10 2.94 2.94 349. 232. 581. 3.63 2.41 6.04
1.001 0.666 1.666 2.174 0.001 0.562 0.153
ECAOOHTOLBS0432142020304 01 BG2:17.4 0.34 1.09 0.87 49. 0.
42.70 2.94 2.94 131. 72. 203. 1.61 0.89 2.51
0.278 0.154 0.432 1.360 0.001 0.233 0.064
ECAO TSVBS0641202020103 01 BG1: 8.0 0.42 0.25 2.73 401. 0.
42.70 2.94 2.94 1664. 1322. 2986. 15.62 12.40 28.02
3.264 2.592 5.856 3.503 0.038 2.609 0.712
ECAOINTSVBS0431182020103 01 BG1: 8.0 0.23 0.30 2.73 85. 0.
43.00 2.94 2.94 353. 280. 633. 3.17 2.52 5.68
0.360 0.286 0.645 0.853 0.008 0.529 0.144
ECAOINTSVBS0432181020103 01 BG1: 8.0 0.50 0.30 2.73 90. 0.
43.00 2.94 2.94 374. 248. 622. 4.38 2.91 7.29
1.094 0.728 1.822 1.093 0.010 0.679 0.185
ECAOINTSVBS0441182020103 01 BG1: 8.0 0.36 0.79 2.73 1664. 0.
37.10 2.94 2.94 6906. 5485. 12391. 71.46 56.76 128.22
12.792 10.159 22.951 50.646 0.175 11.940 3.256
ECAO TSXBS0242412020703 01 BF3:18.7 0.48 0.24 8.41 134. 0.
43.00 2.94 2.94 556. 370. 926. 6.32 4.21 10.53

```
 1.517    1.009    2.526       1.263       0.044         0.980         0.267
ECAO  TSXBS0441142020103 01              BF3:18.7 0.30  0.36  6.35   750.   0.
36.70  2.94  2.94        0.       652.       652.     0.00     6.66     6.66
 0.000    0.998    0.998       1.198       0.021         0.620         0.169
ECAO  TSXBS0441142020103 01              BF2:11.1 0.30  0.36  3.77   750.   0.
36.70  2.94  2.94     3113.      1820.      4933.    31.77    18.57    50.34
 4.765    2.786    7.551       9.061       0.095         4.688         1.279
ECAO  TSXBS0641042020103 01              BF2:11.1 0.36  0.36  3.77  1228.   0.
35.60  2.94  2.94     5096.      4048.      9144.    49.80    39.55    89.36
 8.915    7.080   15.995      16.084       0.168         8.321         2.269
ECAO  TSXBS0641202020103 01              BG1: 8.0 0.41  0.55  2.73   993.   0.
41.80  2.94  2.94     4121.      3273.      7394.    42.35    33.63    75.98
 8.766    6.962   15.728      20.895       0.104         7.076         1.930
ECAO  TSYBS0432192020204 01              BF1: 6.8 0.37  0.58  4.10    63.   0.
42.70  2.94  2.94      261.       174.       435.     2.92     1.94     4.86
 0.546    0.363    0.909       1.408       0.010         0.453         0.123
ECAO  TSYBS0441192020103 01              BG1: 8.0 0.41  0.70  2.73  1722.   0.
35.60  2.94  2.94     7147.      5676.     12823.    69.89    55.51   125.39
14.257   11.323   25.580      43.887       0.171        11.677         3.185
ECAO  TSZBS0431142010103 01              BF3:18.7 0.46  0.60  8.60    69.   0.
43.00  2.94  2.94      286.       111.       397.     2.96     1.15     4.11
 0.679    0.262    0.941       1.233       0.018         0.383         0.104
ECAO  TSZBS0431142010103 01              BF2:11.1 0.46  0.60  5.10    69.   0.
43.00  2.94  2.94        0.        80.        80.     0.00     0.83     0.83
 0.000    0.189    0.189       0.248       0.002         0.077         0.021
ECAOOHTSBBS0441041020304 01              BD1: 5.1 0.65  0.15  0.25   132.   0.
43.00  2.94  2.94      548.       364.       912.     5.07     3.37     8.44
 1.645    1.094    2.740       0.633       0.001         0.786         0.214
Unscrubbed Coal_NOx             3
ECAO  TSBBN0241041020102 01              BA2: 5.2 0.54  1.10  3.31   500.   0.
26.60  1.45  2.45     1011.       481.      1492.     9.67     4.60    14.27
 2.605    0.806    3.411       7.848       0.024         1.329         0.362
ECAO  TSBBN0241041020102 01              BD1: 5.1 0.54  1.50  3.24   500.   0.
26.60  1.45  2.45      728.       578.      1306.     6.96     5.53    12.49
 1.875    0.967    2.843       9.364       0.020         1.163         0.317
ECAO  TSBBN0241042020102 01              BA2: 5.2 0.38  1.10  3.31   343.   0.
32.20  1.45  2.45     1192.       330.      1523.    11.65     3.23    14.88
 2.203    0.397    2.600       8.186       0.025         1.386         0.378
ECAO  TSBBN0241042020102 01              BD1: 5.1 0.38  1.50  3.24   343.   0.
32.20  1.45  2.45        0.       396.       396.     0.00     3.87     3.87
 0.000    0.477    0.477       2.906       0.006         0.361         0.098
ECAO  TSDBC0641061020101 01              BA2: 5.2 0.63  1.10  3.31   800.   0.
27.00  1.51  2.51        0.       613.       613.     0.00     5.66     5.66
 0.000    0.178    0.178       3.115       0.009         0.527         0.144
ECAO  TSDBC0641061020101 01              BD1: 5.1 0.63  1.50  3.24   800.   0.
27.00  1.51  2.51     3320.      2024.      5344.    30.68    18.70    49.38
 9.679    0.589   10.268      37.035       0.080         4.598         1.254
ECAOOHTSDBC0441041020101 01              BE2:10.4 0.52  2.20  6.69  1085.   0.
32.50  1.51  2.51     4503.      3576.      8079.    39.93    31.71    71.65
10.382    0.825   11.207      78.811       0.240         6.672         1.820
ECAOOHTSDBC0441042020101 01              BE2:10.4 0.41  2.20  6.69   500.   0.
27.00  1.51  2.51      744.       591.      1335.     7.36     5.85    13.21
 1.516    0.120    1.636      14.526       0.044         1.230         0.335
ECAOOHTSDBN0441042020102 01              BE2:10.4 0.36  2.20  6.69   163.   0.
32.20  1.45  2.45      567.       450.      1017.     5.34     4.24     9.57
 0.963    0.498    1.461      10.530       0.032         0.891         0.243
ECAO  TSEBC0641042020101 01              BA2: 5.2 0.49  1.10  3.31  4200.   0.
25.70  1.51  2.51    17431.     13844.     31274.   159.42   126.62   286.04
38.978    3.102   42.080     157.320       0.473        26.636         7.264
ECAOOHTSEBN0441142020102 01              BE2:10.4 0.37  2.20  6.69   129.   0.
32.20  1.45  2.45      156.       124.       281.     1.49     1.18     2.67
 0.275    0.142    0.418       2.936       0.009         0.249         0.068
ECAOOHTSEBN0441142020102 01              BE1: 6.1 0.37  2.20  3.89   129.   0.
32.20  1.45  2.45      188.       149.       337.     1.79     1.42     3.20
 0.330    0.171    0.501       3.524       0.006         0.298         0.081
```

ECAO TSBBC0641062020101 01 BA2: 5.2 0.41 1.10 3.31 225. 0.
27.00 1.51 2.51 455. 361. 816. 4.64 3.68 8.32
0.951 0.076 1.027 4.578 0.014 0.775 0.211
ECAO TSBBC0641062020101 01 BD1: 5.1 0.41 1.50 3.24 225. 0.
27.00 1.51 2.51 327. 260. 587. 3.34 2.65 5.99
0.685 0.054 0.739 4.495 0.010 0.558 0.152
ECAO TSBBC0641062020201 01 BA2: 5.2 0.42 1.10 4.65 300. 0.
22.00 1.51 2.51 1043. 828. 1871. 10.46 8.31 18.78
2.203 0.175 2.377 10.327 0.044 1.748 0.477
ECAOOHTSBBC0441041020201 01 BD1: 5.1 0.64 1.50 4.56 630. 0.
22.00 1.51 2.51 2190. 1011. 3201. 21.26 9.81 31.07
6.770 0.314 7.084 23.303 0.071 2.893 0.789
ECAOOHTSBBC0441041020201 01 BA2: 5.2 0.64 1.10 4.65 630. 0.
22.00 1.51 2.51 0. 728. 728. 0.00 7.07 7.07
0.000 0.226 0.226 3.887 0.016 0.658 0.179
ECAOOHTSCBC0441041020101 01 BA2: 5.2 0.52 1.10 3.31 500. 0.
18.00 1.51 2.51 1738. 1381. 3119. 16.85 13.38 30.22
4.346 0.348 4.694 16.623 0.050 2.815 0.768
ECAOWVTSFBN0641042020102 01 BD1: 5.1 0.48 1.50 3.24 555. 0.
26.60 1.45 2.45 2303. 891. 3194. 21.27 8.23 29.50
5.127 1.288 6.415 22.127 0.048 2.747 0.749
ECAOWVTSFBN0641042020102 01 BA2: 5.2 0.48 1.10 3.31 555. 0.
26.60 1.45 2.45 0. 641. 641. 0.00 5.92 5.92
0.000 0.927 0.927 3.259 0.010 0.552 0.150
ECAOOHTSGBN0441142020102 01 BE2:10.4 0.30 2.20 6.69 597. 0.
26.60 1.45 2.45 2075. 958. 3034. 18.57 8.58 27.15
2.786 0.836 3.622 29.861 0.091 2.528 0.689
ECAOOHTSGBN0441142020102 01 BE1: 6.1 0.30 2.20 3.89 597. 0.
26.60 1.45 2.45 0. 690. 690. 0.00 6.17 6.17
0.000 0.602 0.602 6.792 0.012 0.575 0.157
ECAO TSHBN0441041020102 01 BA2: 5.2 0.58 1.10 3.31 600. 0.
26.60 1.45 2.45 2086. 1271. 3357. 19.81 12.07 31.88
5.725 2.264 7.989 17.535 0.053 2.969 0.810
ECAO TSHBN0441042020102 01 BA2: 5.2 0.43 1.10 3.31 600. 0.
26.60 1.45 2.45 2490. 1657. 4147. 23.42 15.58 39.00
5.011 2.165 7.177 21.448 0.065 3.631 0.990
ECAO TSHBN0441042020302 01 BA2: 5.2 0.40 1.10 0.57 180. 0.
32.20 1.45 2.45 626. 381. 1007. 6.25 3.81 10.06
1.256 0.499 1.755 5.530 0.003 0.936 0.255
ECAO TSLBC0441181020101 01 BB2: 4.1 0.53 1.00 2.62 1260. 0.
27.00 1.51 2.51 1150. 913. 2063. 11.16 8.86 20.02
2.940 0.235 3.174 10.008 0.026 1.864 0.508
ECAO TSLBC0441181020101 01 BE1: 6.1 0.53 2.20 3.89 1260. 0.
27.00 1.51 2.51 828. 657. 1485. 8.03 6.38 14.41
2.117 0.169 2.286 15.853 0.028 1.342 0.366
ECAO TSGSC0441201020101 01 SB2: 6.5 0.88 1.00 6.29 1022. 0.
32.50 1.51 2.51 3655. 2822. 6476. 34.09 26.32 60.41
14.949 1.158 16.107 30.206 0.190 5.829 1.590
ECAOOHTSIBC0441041020101 01 BE2:10.4 0.63 2.20 6.69 1014. 0.
32.60 1.51 2.51 4208. 3342. 7551. 39.01 30.99 70.00
12.290 0.976 13.266 77.001 0.234 6.519 1.778
ECAO TSXBC0641202020201 01 BB2: 4.1 0.41 1.00 3.69 500. 0.
18.00 1.51 2.51 2075. 1648. 3723. 20.50 16.28 36.78
4.213 0.334 4.547 18.392 0.068 3.425 0.934
Unscrubbed Coal 4
ECAO TCOLU0211412050710 01 BD2:12.5 0.40 1.50 12.54 8. 0.
32.00 1.54 1.54 33. 26. 60. 0.35 0.27 0.62
0.069 0.055 0.124 0.465 0.004 0.058 0.016
ECAO TCOLU0241082050710 01 BA2: 5.2 0.11 0.28 5.17 204. 0.
11.70 1.54 1.54 750. 563. 1313. 6.75 5.07 11.82
0.371 0.279 0.650 1.625 0.031 1.101 0.300
ECAO TCOLU0411181050710 01 SD2: 6.7 0.52 1.40 6.70 39. 0.
32.00 1.54 1.54 162. 129. 290. 1.68 1.34 3.02
0.433 0.344 0.778 2.114 0.010 0.291 0.079
ECAO TCOLU0411142050710 01 BE2:10.4 0.48 2.20 10.45 111. 0.

32.00 1.54 1.54 461. 0. 461. 4.79 0.00 4.79
1.145 0.000 1.145 5.270 0.025 0.446 0.122
ECAO TCOLU0411142050710 01 BE1: 6.1 0.48 2.20 6.08 111. 0.
32.00 1.54 1.54 0. 366. 366. 0.00 3.81 3.81
0.000 0.909 0.909 4.186 0.012 0.354 0.097
ECAO TCOLU0431041020110 01 BA2: 5.2 0.81 1.10 3.31 123. 0.
32.00 1.54 0.00 149. 0. 149. 1.55 0.00 1.55
0.631 0.000 0.631 0.853 0.003 0.144 0.039
ECAO TCOLU0431041020110 01 BD1: 5.1 0.81 1.50 3.24 123. 0.
32.00 1.54 0.00 179. 0. 179. 1.86 0.00 1.86
0.758 0.000 0.758 1.396 0.003 0.173 0.047
ECAO TCOLU0431141020110 01 BD2:12.5 0.80 1.50 8.03 94. 0.
32.00 1.54 0.00 137. 0. 137. 1.42 0.00 1.42
0.569 0.000 0.569 1.067 0.006 0.132 0.036
ECAO TCOLU0431141020110 01 BE2:10.4 0.80 2.20 6.69 94. 0.
32.00 1.54 0.00 114. 0. 114. 1.19 0.00 1.19
0.474 0.000 0.474 1.304 0.004 0.110 0.030
ECAO TCOLU0431142020110 01 BD2:12.5 0.46 1.50 8.03 106. 0.
32.00 1.54 0.00 154. 0. 154. 1.60 0.00 1.60
0.369 0.000 0.369 1.203 0.006 0.149 0.041
ECAO TCOLU0431142020110 01 BE2:10.4 0.46 2.20 6.69 106. 0.
32.00 1.54 0.00 129. 0. 129. 1.34 0.00 1.34
0.307 0.000 0.307 1.470 0.004 0.124 0.034
ECAO TCOLU0431182020110 01 BB2: 4.1 0.45 1.00 2.62 179. 0.
32.00 1.54 1.54 217. 317. 534. 2.26 3.30 5.56
0.503 0.736 1.239 2.778 0.007 0.517 0.141
ECAO TCOLU0431182020110 01 BE1: 6.1 0.45 2.20 3.89 179. 0.
32.00 1.54 1.54 260. 0. 260. 2.71 0.00 2.71
0.604 0.000 0.604 2.980 0.005 0.252 0.069
ECAO TCOLU0431192020110 01 BE1: 6.1 0.46 2.20 3.89 155. 0.
32.00 1.54 1.54 539. 328. 867. 5.60 3.42 9.02
1.289 0.786 2.074 9.921 0.018 0.840 0.229
ECAO TCOLU0431042050710 01 BA2: 5.2 0.48 1.10 5.17 72. 0.
32.00 1.54 1.54 87. 106. 194. 0.91 1.11 2.01
0.217 0.264 0.481 1.107 0.005 0.187 0.051
ECAO TCOLU0431042050710 01 BD1: 5.1 0.48 1.50 5.07 72. 0.
32.00 1.54 1.54 105. 0. 105. 1.09 0.00 1.09
0.260 0.000 0.260 0.817 0.003 0.101 0.028
ECAO TCOLU0611062020210 01 BD1: 5.1 0.46 1.50 4.56 40. 0.
32.00 1.54 1.54 166. 132. 298. 1.73 1.37 3.10
0.397 0.315 0.712 2.323 0.007 0.288 0.079
ECAO TCOLU0631051020110 01 BD2:12.5 0.80 1.50 8.03 46. 0.
32.00 1.54 0.00 123. 0. 123. 1.28 0.00 1.28
0.510 0.000 0.510 0.957 0.005 0.119 0.032
ECAO TCOLU0631202020110 01 BB2: 4.1 0.46 1.00 2.62 32. 0.
32.00 1.54 1.54 111. 68. 179. 1.16 0.71 1.86
0.266 0.162 0.428 0.931 0.002 0.173 0.047
ECAOVATCOLU0331062020110 01 BA2: 5.2 0.40 1.10 3.31 90. 0.
32.00 1.54 1.54 313. 191. 504. 3.25 1.98 5.24
0.651 0.397 1.047 2.880 0.009 0.488 0.133
ECAO TOLBU0411181020710 01 BE1: 6.1 0.93 2.20 6.08 14. 0.
26.40 1.54 1.54 58. 46. 104. 0.60 0.48 1.08
0.281 0.223 0.504 1.193 0.003 0.101 0.028
ECAO TOLBU0411182020710 01 BE1: 6.1 0.25 2.20 6.08 12. 0.
32.00 1.54 1.54 50. 40. 89. 0.52 0.41 0.93
0.065 0.052 0.117 1.022 0.003 0.087 0.024
ECAO TOLBU0412181020210 01 BB2: 4.1 0.85 1.00 3.69 39. 0.
32.00 1.54 1.54 104. 108. 212. 1.42 1.47 2.89
0.606 0.627 1.234 1.443 0.005 0.269 0.073
ECAO TOLBU0412181020710 01 BF1: 6.8 0.88 3.00 6.83 20. 0.
32.00 1.54 1.54 83. 66. 149. 1.16 0.92 2.08
0.511 0.406 0.917 3.127 0.007 0.194 0.053
ECAO TOLBU0611191020710 01 BG1: 8.0 0.91 5.00 8.04 10. 0.
32.00 1.54 1.54 42. 33. 74. 0.43 0.34 0.77
0.197 0.156 0.353 1.936 0.003 0.072 0.020

ECAO TOLBU0631191040110 01 BE1: 6.1 0.52 2.20 3.95 26. 0.
26.40 1.54 1.54 90. 38. 129. 0.94 0.40 1.34
0.246 0.105 0.351 1.473 0.003 0.125 0.034
ECAO TOLBU0632052020110 01 BD2:12.5 0.47 1.50 8.03 145. 0.
32.00 1.54 0.00 387. 0. 387. 4.41 0.00 4.41
1.032 0.000 1.032 3.308 0.018 0.411 0.112
ECAO TOLBU0641052020110 01 BD2:12.5 0.38 1.50 8.03 137. 0.
32.00 1.54 1.54 476. 290. 767. 4.93 3.00 7.94
0.939 0.572 1.512 5.951 0.032 0.739 0.202
ECAOMDTOLBU0231082020110 01 BD2:12.5 0.43 1.50 8.03 86. 0.
32.00 1.54 0.00 229. 0. 229. 2.27 0.00 2.27
0.486 0.000 0.486 1.703 0.009 0.211 0.058
ECAO TSBBU0241042020110 01 BA2: 5.2 0.40 1.10 3.31 562. 0.
26.40 1.54 1.54 1136. 1191. 2327. 11.17 11.71 22.88
2.229 2.336 4.565 12.585 0.038 2.131 0.581
ECAO TSBBU0241042020110 01 BD1: 5.1 0.40 1.50 3.24 562. 0.
26.40 1.54 1.54 818. 0. 818. 8.04 0.00 8.04
1.605 0.000 1.605 6.033 0.013 0.749 0.204
ECAO TSBBU0632061020110 01 BA2: 5.2 0.56 1.10 3.31 141. 0.
32.00 1.54 0.00 262. 0. 262. 3.11 0.00 3.11
0.864 0.000 0.864 1.710 0.005 0.290 0.079
ECAO TSBBU0641062020110 01 BA2: 5.2 0.41 1.10 3.31 116. 0.
32.00 1.54 1.54 0. 112. 112. 0.00 1.11 1.11
0.000 0.229 0.229 0.612 0.002 0.104 0.028
ECAO TSBBU0641062020110 01 BD1: 5.1 0.41 1.50 3.24 116. 0.
32.00 1.54 1.54 403. 134. 537. 4.02 1.34 5.35
0.827 0.275 1.102 4.013 0.009 0.498 0.136
ECAOINTSBBU0441182020110 01 BF1: 6.8 0.45 3.00 4.37 378. 0.
26.40 1.54 1.54 1314. 801. 2115. 12.93 7.88 20.81
2.922 1.781 4.703 31.217 0.045 1.938 0.529
ECAOOHTSBBU0431042020110 01 BD1: 5.1 0.37 1.50 3.24 188. 0.
32.00 1.54 1.54 654. 398. 1052. 6.56 4.00 10.55
1.200 0.731 1.931 7.915 0.017 0.983 0.268
ECAOOHTSBBU0441041020110 01 BD1: 5.1 0.65 1.50 3.24 134. 0.
32.00 1.54 1.54 0. 198. 198. 0.00 1.87 1.87
0.000 0.607 0.607 1.403 0.003 0.174 0.048
ECAOOHTSBBU0441041020110 01 BA2: 5.2 0.65 1.10 3.31 134. 0.
32.00 1.54 1.54 466. 0. 466. 4.41 0.00 4.41
1.430 0.000 1.430 2.423 0.007 0.410 0.112
ECAOOHTSBBU0441042020110 01 BD1: 5.1 0.42 1.50 3.24 633. 0.
30.10 1.54 1.54 2627. 1016. 3643. 24.38 9.43 33.81
5.168 1.999 7.167 25.356 0.055 3.148 0.859
ECAOOHTSBBU0441042020110 01 BA2: 5.2 0.42 1.10 3.31 633. 0.
30.10 1.54 1.54 0. 732. 732. 0.00 6.79 6.79
0.000 1.439 1.439 3.734 0.011 0.632 0.172
ECAOINTSCBU0431181020110 01 BE1: 6.1 0.62 2.20 3.89 255. 0.
32.00 1.54 0.00 371. 0. 371. 3.87 0.00 3.87
1.202 0.000 1.202 4.252 0.008 0.360 0.098
ECAOINTSCBU0431181020110 01 BB2: 4.1 0.62 1.00 2.62 255. 0.
32.00 1.54 0.00 309. 0. 309. 3.22 0.00 3.22
1.002 0.000 1.002 1.610 0.004 0.300 0.082
ECAOINTSCBU0432181020110 01 BE1: 6.1 0.55 2.20 3.89 95. 0.
32.00 1.54 0.00 138. 0. 138. 1.49 0.00 1.49
0.409 0.000 0.409 1.634 0.003 0.138 0.038
ECAOINTSCBU0432181020110 01 BB2: 4.1 0.55 1.00 2.62 95. 0.
32.00 1.54 0.00 115. 0. 115. 1.24 0.00 1.24
0.341 0.000 0.341 0.619 0.002 0.115 0.031
ECAOINTSCBU0441182020110 01 BB2: 4.1 0.36 1.00 2.62 1292. 0.
26.40 1.54 1.54 4492. 2737. 7229. 45.05 27.45 72.50
8.108 4.942 13.050 36.249 0.095 6.751 1.841
ECAO TSDBU0641062020110 01 BA2: 5.2 0.45 1.10 3.31 260. 0.
32.00 1.54 1.54 0. 417. 417. 0.00 3.91 3.91
0.000 0.876 0.876 2.152 0.006 0.364 0.099
ECAO TSDBU0641062020110 01 BD1: 5.1 0.45 1.50 3.24 260. 0.
32.00 1.54 1.54 1079. 301. 1380. 10.12 2.82 12.93

2.266 0.631 2.897 9.700 0.021 1.204 0.328
ECAOWVTSDBU0641051010110 01 BD2:12.5 0.63 1.50 8.03 781. 0.
32.00 1.54 1.54 3241. 1655. 4896. 30.54 15.59 46.13
9.665 4.934 14.599 34.594 0.185 4.295 1.171
ECAOOHTSEBU0441142020110 01 BE2:10.4 0.38 2.20 6.69 652. 0.
32.00 1.54 1.54 790. 754. 1544. 7.79 7.43 15.22
1.469 1.400 2.869 16.743 0.051 1.417 0.387
ECAOOHTSEBU0441142020110 01 BE1: 6.1 0.38 2.20 3.89 652. 0.
32.00 1.54 1.54 949. 209. 1158. 9.35 2.06 11.41
1.763 0.388 2.152 12.555 0.022 1.063 0.290
ECAOOHTSEBU0442142020110 01 BE2:10.4 0.38 2.20 6.69 156. 0.
32.00 1.54 0.00 63. 0. 63. 0.67 0.00 0.67
0.126 0.000 0.126 0.738 0.002 0.062 0.017
ECAOOHTSEBU0442142020110 01 BE1: 6.1 0.38 2.20 3.89 156. 0.
32.00 1.54 0.00 227. 0. 227. 2.42 0.00 2.42
0.455 0.000 0.455 2.657 0.005 0.225 0.061
ECAO TSESU0441172020110 01 SB1: 4.5 0.28 0.65 4.41 957. 0.
26.70 1.54 1.54 3972. 3154. 7126. 39.55 31.41 70.96
5.438 4.319 9.757 22.992 0.157 6.846 1.867
ECAO TSFBU0431142020210 01 BA2: 5.2 0.35 1.10 4.65 252. 0.
32.00 1.54 0.00 469. 0. 469. 4.79 0.00 4.79
0.850 0.000 0.850 2.633 0.011 0.446 0.122
ECAO TSFBU0441142020110 01 BD2:12.5 0.48 1.50 8.03 596. 0.
26.40 1.54 1.54 867. 689. 1556. 7.88 6.26 14.14
1.880 1.493 3.373 10.607 0.057 1.317 0.359
ECAO TSFBU0441142020110 01 BE2:10.4 0.48 2.20 6.69 596. 0.
26.40 1.54 1.54 1205. 574. 1779. 10.95 5.22 16.16
2.611 1.244 3.855 17.780 0.054 1.505 0.410
ECAOWVTSFBU0641042020110 01 BD1: 5.1 0.38 1.50 3.24 552. 0.
32.00 1.54 1.54 2291. 886. 3177. 20.18 7.80 27.98
3.814 1.475 5.289 20.987 0.045 2.606 0.711
ECAOWVTSFBU0641042020110 01 BA2: 5.2 0.38 1.10 3.31 552. 0.
32.00 1.54 1.54 0. 638. 638. 0.00 5.62 5.62
0.000 1.062 1.062 3.091 0.009 0.523 0.143
ECAO TSFSU0441202020110 01 SB2: 6.5 0.31 0.66 6.29 2600. 0.
14.60 1.54 1.54 10790. 7179. 17969. 105.66 70.29 175.95
16.536 11.001 27.537 57.889 0.553 16.976 4.630
ECAOOHTSGBU0441141010110 01 BE2:10.4 0.54 2.20 6.69 230. 0.
32.00 1.54 0.00 335. 0. 335. 3.47 0.00 3.47
0.933 0.000 0.933 3.817 0.012 0.323 0.088
ECAOOHTSGBU0441141010110 01 BD2:12.5 0.54 1.50 8.03 230. 0.
32.00 1.54 0.00 279. 0. 279. 2.89 0.00 2.89
0.778 0.000 0.778 2.168 0.012 0.269 0.073
ECAOOHTSGBU0441142020110 01 BE2:10.4 0.35 2.20 6.69 945. 0.
27.40 1.54 1.54 0. 910. 910. 0.00 8.72 8.72
0.000 1.548 1.548 9.593 0.029 0.812 0.221
ECAOOHTSGBU0441142020110 01 BE1: 6.1 0.35 2.20 3.89 945. 0.
27.40 1.54 1.54 1710. 1092. 2802. 16.39 10.47 26.86
2.909 1.858 4.767 29.544 0.052 2.501 0.682
ECAOOHTSGBU0441142020110 01 BD2:12.5 0.35 1.50 8.03 945. 0.
27.40 1.54 1.54 811. 0. 811. 7.77 0.00 7.77
1.379 0.000 1.379 5.828 0.031 0.724 0.197
ECAO TSGSU0441201020210 01 SB2: 6.5 0.94 1.00 6.09 195. 0.
32.00 1.54 0.00 678. 0. 678. 6.45 0.00 6.45
3.033 0.000 3.033 3.226 0.020 0.623 0.170
ECAO TSHBU0441041020110 01 BA2: 5.2 0.54 1.10 3.31 585. 0.
26.40 1.54 1.54 0. 563. 563. 0.00 5.23 5.23
0.000 1.418 1.418 2.878 0.009 0.487 0.133
ECAO TSHBU0441041020110 01 BD1: 5.1 0.54 1.50 3.24 585. 0.
26.40 1.54 1.54 2428. 676. 3104. 22.55 6.28 28.83
6.112 1.702 7.814 21.625 0.047 2.685 0.732
ECAO TSHBU0441042020110 01 BA2: 5.2 0.42 1.10 3.31 2300. 0.
27.80 1.54 1.54 0. 2531. 2531. 0.00 23.68 23.68
0.000 4.996 4.996 13.022 0.039 2.205 0.601
ECAO TSHBU0441042020110 01 BD1: 5.1 0.42 1.50 3.24 2300. 0.

27.80 1.54 1.54   7996.   2658.   10654.   74.80   24.87   99.67
15.783   5.247   21.030   74.752   0.162   9.281   2.531
ECAO TSHBU0441182020110 01   BB2: 4.1 0.35 1.00 2.62   634.   0.
28.30 1.54 1.54   1793.   1343.   3136.   18.64   13.96   32.61
 3.244   2.430   5.673   16.303   0.043   3.036   0.828
ECAO TSHBU0441042020310 01   BA2: 5.2 0.40 1.10 0.57   540.   0.
32.00 1.54 1.54   1877.   1144.   3021.   18.11   11.03   29.14
 3.630   2.212   5.843   16.028   0.008   2.714   0.740
ECAO TSHBU0641041020110 01   BA2: 5.2 0.72 1.10 3.31   680.   0.
32.00 1.54 1.54   2822.   1004.   3826.   26.27   9.35   35.62
 9.432   3.355   12.788   19.591   0.059   3.317   0.905
ECAO TSHBU0641042020110 01   BA2: 5.2 0.42 1.10 3.31   440.   0.
32.00 1.54 1.54   1826.   706.   2532.   16.30   6.30   22.60
 3.422   1.324   4.746   12.429   0.037   2.104   0.574
ECAO TSHBU0641042020110 01   BD1: 5.1 0.42 1.50 3.24   440.   0.
32.00 1.54 1.54   0.   509.   509.   0.00   4.54   4.54
 0.000   0.953   0.953   3.404   0.007   0.423   0.115
ECAO TSHBU0641182020110 01   BB2: 4.1 0.43 1.00 2.62 1003.   0.
27.40 1.54 1.54   3487.   2125.   5612.   35.84   21.84   57.68
 7.778   4.740   12.518   28.842   0.076   5.372   1.465
ECAO TSHBU0642181020110 01   BB2: 4.1 0.50 1.00 2.62   105.   0.
32.00 1.54 0.00   127.   0.   127.   1.41   0.00   1.41
 0.356   0.000   0.356   0.706   0.002   0.131   0.036
ECAO TSHBU0642181020110 01   BE1: 6.1 0.50 2.20 3.89   105.   0.
32.00 1.54 0.00   153.   0.   153.   1.69   0.00   1.69
 0.427   0.000   0.427   1.863   0.003   0.158   0.043
ECAO TSHBU0642182020210 01   BB2: 4.1 0.42 1.00 3.69   108.   0.
32.00 1.54 0.00   288.   0.   288.   3.23   0.00   3.23
 0.680   0.000   0.680   1.615   0.006   0.301   0.082
ECAO TSJBU0441202020410 01   BB2: 4.1 0.40 1.00 0.82   560.   0.
32.00 1.54 1.54   1947.   1186.   3133.   19.94   12.16   32.10
 3.979   2.425   6.404   16.050   0.013   2.989   0.815
ECAO TSKBU0441042020110 01   BA2: 5.2 0.39 1.10 3.31   652.   0.
28.50 1.54 1.54   1318.   628.   1946.   12.73   6.07   18.80
 2.470   1.177   3.647   10.340   0.031   1.751   0.477
ECAO TSKBU0441042020110 01   BD1: 5.1 0.39 1.50 3.24   652.   0.
28.50 1.54 1.54   949.   754.   1702.   9.17   7.28   16.45
 1.779   1.413   3.191   12.338   0.027   1.532   0.418
ECAOINTSKBU0432182020110 01   BE1: 6.1 0.33 2.20 3.89   161.   0.
32.00 1.54 0.00   234.   0.   234.   2.70   0.00   2.70
 0.448   0.000   0.448   2.969   0.005   0.251   0.069
ECAOINTSKBU0432182020110 01   BB2: 4.1 0.33 1.00 2.62   161.   0.
32.00 1.54 0.00   195.   0.   195.   2.25   0.00   2.25
 0.373   0.000   0.373   1.125   0.003   0.209   0.057
ECAOINTSKBU0432182020210 01   BE1: 6.1 0.39 2.20 5.47   56.   0.
32.00 1.54 0.00   81.   0.   81.   0.94   0.00   0.94
 0.183   0.000   0.183   1.033   0.003   0.087   0.024
ECAOINTSKBU0432182020210 01   BB2: 4.1 0.39 1.00 3.69   56.   0.
32.00 1.54 0.00   68.   0.   68.   0.78   0.00   0.78
 0.153   0.000   0.153   0.391   0.001   0.073   0.020
ECAO TSLBU0231052020110 01   BD2:12.5 0.35 1.50 8.03   98.   0.
32.00 1.54 1.54   341.   208.   548.   3.53   2.15   5.69
 0.617   0.376   0.993   4.267   0.023   0.530   0.144
ECAO TSLBU0232052020110 01   BD2:12.5 0.33 1.50 8.03   98.   0.
32.00 1.54 1.54   261.   208.   469.   2.80   2.22   5.03
 0.461   0.366   0.827   3.769   0.020   0.468   0.128
ECAO TSLBU0241052020110 01   BD2:12.5 0.38 1.50 8.03   137.   0.
32.00 1.54 1.54   365.   290.   656.   3.80   3.02   6.82
 0.726   0.577   1.302   5.114   0.027   0.635   0.173
ECAO TSLBU0411141020710 01   BF3:18.7 0.86 3.00 18.69   66.   0.
30.70 1.54 1.54   0.   218.   218.   0.00   2.26   2.26
 0.000   0.973   0.973   3.395   0.021   0.211   0.057
ECAO TSLBU0411141020710 01   BF2:11.1 0.86 3.00 11.09   66.   0.
30.70 1.54 1.54   274.   0.   274.   2.85   0.00   2.85
 1.226   0.000   1.226   4.275   0.016   0.265   0.072

```
  ECAO  TSLBU0411141050710 01              BF3:18.7 0.83  3.00 18.69    20.   0.
  32.00  1.54  1.54       83.        66.       149.     0.86     0.69     1.55
   0.360    0.286    0.647       2.323       0.014         0.144         0.039
  ECAO  TSLBU0412141020710 01              BG2:17.4 0.86  5.00 17.43    12.   0.
  32.00  1.54  1.54       50.        40.        89.     0.64     0.51     1.15
   0.275    0.218    0.493       2.868       0.010         0.107         0.029
  ECAO  TSXBU0641041020110 01              BA2: 5.2 0.72  0.66  3.31   290.   0.
  32.00  1.54  1.54     1204.       614.      1818.    11.40     5.82    17.22
   4.081    2.084    6.165       5.683       0.028         1.604         0.437
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  ECAO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   810.   0.
 133.00  0.91  0.91     3851.      2811.      6662.    40.67    29.68    70.35
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   873.   0.
 104.00  0.66  0.66     4176.      3033.      7208.    42.42    30.80    73.22
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1017.   0.
 206.80  1.14  1.14     4308.      2371.      6679.    46.18    25.42    71.61
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1060.   0.
 156.80  1.14  1.14     4397.      2635.      7032.    46.98    28.16    75.14
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1238.   0.
 109.60  0.60  0.60     5547.      3637.      9184.    56.94    37.33    94.27
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   810.   0.
 133.00  0.91  0.91     3626.      2305.      5931.    39.34    25.01    64.35
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  ECAO  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  1109.   0.
  15.00  0.00  0.00     1806.      1169.      2974.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  ECAO  CC   0222   000000 00              GAS      0.03  0.00  0.00  1491.   0.
  14.00  1.03  1.03      334.       255.       589.     2.53     1.94     4.47
   0.042    0.032    0.074       0.000       0.000         0.237         0.065
  ECAO  CC   0422   000000 00              GAS      0.02  0.00  0.00  4912.   0.
  13.90  1.03  1.03     1741.      2529.      4270.    13.06    18.97    32.03
   0.131    0.190    0.320       0.000       0.000         1.700         0.464
IGCC                           10
  ECAO  IGCC 0441142050710 00              BG2:17.4 0.10  0.00  0.87   262.   0.
  31.40  1.00  1.00     1135.       877.      2013.     8.26     6.38    14.64
   0.413    0.319    0.732       0.000       0.006         1.364         0.372
Turbine                        11
  ECAO  CT   0222   000000 00              GAS      0.08  0.00  0.00   892.   0.
   2.80  0.00  1.03        0.        89.        89.     0.00     0.97     0.97
   0.000    0.039    0.039       0.000       0.000         0.052         0.014
  ECAO  CT   0412   000000 00              GAS      0.09  0.00  0.00   165.   0.
   3.50  0.00  1.03        0.        28.        28.     0.00     0.31     0.31
   0.000    0.014    0.014       0.000       0.000         0.016         0.004
  ECAO  CT   0612   000000 00              GAS      0.13  0.00  0.00     6.   0.
  11.20  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  ECAOVACT   0322   000000 00              GAS      0.08  0.00  0.00   250.   0.
   2.80  0.00  1.03        0.        43.        43.     0.00     0.47     0.47
   0.000    0.019    0.019       0.000       0.000         0.025         0.007
Biomass                        12
  ECAO  BIOMS00  42 000000 00              B1-: 0.6 0.02  0.08  0.57    84.   0.
  44.80  5.36  5.36      364.       281.       645.     3.36     2.59     5.95
   0.034    0.026    0.060       0.238       0.002         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  ECAO  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    12.   0.
```

```
  78.60 10.48 10.48       54.        41.        95.     0.73     0.56     1.29
   0.090    0.069    0.159       0.000       0.000         0.000         0.000
Wind                           15
  ECAO  WIND 00     000000 00              NONE     0.00  0.00 71.00   105.   0.
  26.40  0.00  0.00      164.        92.       256.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  ECAO  OTHER00     000000 00              NONE     0.00  0.00  0.00    90.   0.
 103.60  0.00  0.00      397.       313.       710.     4.36     3.44     7.81
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                   19
  ECAO  WASTE062    000000 00              WASTE    0.42  0.00  0.00    60.   0.
 103.60  0.00  0.00      268.       205.       473.     2.95     2.25     5.20
   0.614    0.468    1.082       0.000       0.000         0.000         0.000
Pump Storage                   20
  ECAO  PUMPS00     000000 00              NONE     0.00  0.00 71.00   245.   0.
   6.50  0.00  0.00      152.        37.       189.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
  ECAO  CGCOU0231412050710 01            BA2: 5.2 0.40  1.10  5.17   127.   0.
  17.40  1.54  0.00      330.         0.       330.     3.29     0.00     3.29
   0.659    0.000    0.659       1.809       0.009         0.306         0.084
  ECAO  CGCOU0411142050710 01            BA2: 5.2 0.48  1.10  5.17     1.   0.
  17.40  1.54  1.54        4.         3.         7.     0.03     0.03     0.06
   0.008    0.006    0.014       0.033       0.000         0.006         0.002
  ECAO  CGCOS0631041050303 01            BF2:11.1 0.55  0.72  0.33    60.   0.
  23.10  2.94  2.94      243.       196.       439.     1.86     1.50     3.37
   0.514    0.415    0.930       1.212       0.001         0.314         0.086
Cgn_Gas                        23
  ECAO  CGCT 0412   000000 00              GAS      0.10  0.00  0.00    17.   0.
   2.80  0.00  1.03        0.         3.         3.     0.00     0.03     0.03
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  ECAO  CGCT 0612   000000 00              GAS      0.08  0.00  0.00     7.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  ECAO  CGCC 0422   000000 00              GAS      0.02  0.00  0.00   525.   0.
  13.90  1.03  1.03      117.       270.       388.     0.88     2.03     2.91
   0.009    0.020    0.029       0.000       0.000         0.154         0.042
Cgn_Oil                        24
Cgn_Other                      25
  ECAO  CGBIO00  42 000000 00            B1-: 0.6 0.02  0.08  0.57     6.   0.
  44.80  5.36  5.36       26.        20.        46.     0.22     0.17     0.39
   0.002    0.002    0.004       0.016       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
  ECAOOHTSDBC0441042020101 01     ML02     BF2:11.1 0.41  0.12  3.77   280.  24.
  36.28  2.50  3.50     1162.       923.      2085.    11.74     9.32    21.06
   2.418    0.191    2.609       1.264       0.027         1.961         0.535
  ECAO  TSLBC0441181020101 01     LO01     BF1: 6.8 0.53  0.15  2.32   677.  21.
  35.28  2.89  3.89     2808.      2230.      5039.    27.82    22.10    49.92
   7.331    0.586    7.917       3.744       0.040         4.649         1.268
```

```
  ECAO  TSLBC0441182020101 01     LO01     BF1: 6.8 0.45  0.15  2.32   617.  22.
  26.09  2.91  3.91     2560.      2033.      4593.    25.79    20.48    46.28
   5.829    0.461    6.290       3.471       0.037         4.309         1.175
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
  ECAO  TSABU0441201020110 01     SCR2     BB2: 4.1 0.77  1.00  2.62   480.  11.
  32.60  1.54  2.57     1992.      1582.      3574.    18.78    14.92    33.69
   7.249    0.574    7.823      16.847       0.044         3.138         0.856
  ECAO  TSBBU0241041020110 01     SCR2     BA2: 5.2 0.57  1.10  3.31  1000.   7.
  26.80  1.54  2.43     4150.      3296.      7446.    38.14    30.30    68.44
  10.833    0.863   11.696      37.642       0.113         6.373         1.738
  ECAOOHTSCBU0441041020210 01     SCR2     BA2: 5.2 0.51  1.10  4.65   600.   7.
  17.80  1.54  2.41     2490.      1978.      4468.    23.25    18.47    41.72
   5.882    0.471    6.353      22.944       0.097         3.885         1.059
  ECAOVATSDBU0341061020110 01     SCR2     BA2: 5.2 0.74  1.10  3.31   925.  10.
  32.50  1.54  2.52     3839.      3049.      6888.    34.71    27.57    62.28
  12.861    1.020   13.881      34.254       0.103         5.800         1.582
  ECAO  TSESU0441171010110 01     SCR2     SB1: 4.5 0.66  1.00  4.41   431.   8.
  21.80  1.54  2.45        0.       893.       893.     0.00     8.79     8.79
   0.000    0.290    0.290       4.393       0.019         0.848         0.231
  ECAO  TSESU0441171010110 01     SCR2     SB2: 6.5 0.66  1.00  6.29   431.   8.
  21.80  1.54  2.45     1789.       527.      2316.    17.59     5.18    22.78
   5.840    0.171    6.011      11.388       0.072         2.197         0.599
  ECAOINTSFBU0441201010110 01     SCR2     BB2: 4.1 0.86  1.00  2.62   500.   7.
  32.40  1.54  2.43     2075.      1648.      3723.    17.79    14.13    31.91
   7.639    0.607    8.246      15.956       0.042         2.972         0.810
  ECAOKYTSFBU0641201020210 01     SCR2     BB2: 4.1 0.53  1.00  3.69   983.   7.
  17.80  1.54  2.43     3417.      2714.      6131.    34.94    27.75    62.69
   9.295    0.735   10.030      31.347       0.116         5.838         1.592
  ECAOKYTSFBU0641202020210 01     SCR1     BB2: 4.1 0.50  1.00  3.69   509.   7.
  21.80  1.54  2.43     2112.      1678.      3790.    21.37    16.97    38.34
   5.299    0.424    5.723      19.169       0.071         3.570         0.974
  ECAOWVTSFBU0641041020110 01     SCR2     BD1: 5.1 0.52  1.50  3.24  1600.   6.
  26.70  1.54  2.39     6640.      5274.     11914.    61.54    48.87   110.41
  15.876    1.271   17.147      82.806       0.179        10.282         2.804
  ECAO  TSISU0441171010110 01     SCR2     SB1: 4.5 0.59  1.00  4.41   469.   8.
  26.80  1.54  2.44     1946.         0.      1946.    19.22     0.00    19.22
   5.632    0.000    5.632       9.612       0.042         1.855         0.506
  ECAO  TSISU0441171010110 01     SCR2     SB2: 6.5 0.59  1.00  6.29   469.   8.
  26.80  1.54  2.44        0.      1546.      1546.     0.00    15.27    15.27
   0.000    0.450    0.450       7.634       0.048         1.473         0.402
  ECAO  TSJBU0441051020110 01     SCR2     BD2:12.5 0.63  1.50  8.03   575.   7.
  26.80  1.54  2.42     2386.      1895.      4282.    21.65    17.20    38.85
   6.777    0.542    7.319      29.136       0.156         3.618         0.987
Ret.ExistScrub & SCR          41
  ECAO  TSVBS0641201020103 01     SCR2     BG1: 8.0 0.63  0.25  2.73   633.   9.
  43.20  2.94  3.88     2627.      2086.      4714.    26.75    21.25    48.00
   8.440    0.669    9.109       6.000       0.045         4.470         1.219
  ECAOINTSVBS0441181010103 01     SCR2     BG1: 8.0 0.75  0.35  3.70   480.  10.
  43.30  2.94  3.92     1992.      1582.      3574.    19.11    15.17    34.28
   7.165    0.569    7.734       6.085       0.041         3.192         0.871
  ECAO  TSXBS0241042020103 01     SCR1     BF2:11.1 0.43  0.24  3.77  1080.   7.
  41.60  2.94  3.82     4482.      3560.      8042.    42.47    33.73    76.20
   9.067    0.843    9.910       9.144       0.099         7.096         1.935
  ECAO  TSXBS0241042020703 01     SCR1     BF2:11.1 0.42  0.24  6.43  1566.   6.
  38.10  2.94  3.79     6499.      5162.     11661.    63.94    50.78   114.72
  13.331    1.270   14.601      13.939       0.234        10.683         2.914
  ECAO  TSXBS0641201020103 01     SCR2     BG1: 8.0 0.67  0.56  2.73   469.  10.
  43.30  2.94  3.92     1946.      1546.      3492.    20.39    16.19    36.58
   6.779    0.542    7.321      10.334       0.034         3.406         0.929
  ECAO  TSXBS0642201020103 01     SCR2     BG1: 8.0 0.60  0.50  2.73   155.  11.
  43.60  2.94  3.98      643.       511.      1154.     7.14     5.67    12.80
   2.158    0.173    2.331       3.201       0.012         1.192         0.325
  ECAOOHTSYBS0441042020103 01     SCR1     BG1: 8.0 0.45  0.45  2.73  1300.   6.
  23.40  2.94  3.78     5395.      4285.      9680.    51.37    40.80    92.18
```

```
  11.559    1.020   12.579      20.509       0.087         8.584         2.341
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2005, Region: ERCT     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  ERCTTXTSXLS2342302020103 02              LF2: 9.8 0.30  0.77  5.48  4341.   0.
  36.00  2.94  2.94    17232.     13686.     30918.   191.74   152.29   344.03
  29.145   23.147   52.292     133.191       0.943        33.613         9.167
  ERCTTXTSXLS2342302030303 02              LF2: 9.8 0.15  0.60  4.21   300.   0.
  23.10  2.94  2.94     1245.       201.      1446.    13.39     2.17    15.55
```

```
   0.984    0.159    1.143       4.668       0.033         1.519         0.414
  ERCTTXTSXLS2342302030303 02              LF1: 5.9 0.15  0.60  2.53   300.   0.
  23.10  2.94  2.94        0.       787.       787.     0.00     8.47     8.47
   0.000    0.622    0.622       2.541       0.011         0.827         0.226
  ERCTTXTSXSS2341292020103 01              SD2: 6.7 0.29  0.07  5.63   435.   0.
  35.60  2.94  2.94     1805.      1434.      3239.    18.05    14.34    32.39
   2.573    2.043    4.616       1.134       0.091         3.125         0.852
  ERCTTXTSXSS2341292020303 01              SD2: 6.7 0.30  0.11  1.81   530.   0.
  23.10  2.94  2.94     2200.      1747.      3947.    20.97    16.65    37.62
   3.145    2.498    5.643       2.133       0.034         3.629         0.990
  ERCTTXTSXSS3541292020103 01              SD2: 6.7 0.46  0.12  5.63   676.   0.
  35.60  2.94  2.94     2805.      2228.      5034.    27.32    21.70    49.01
   6.242    4.958   11.199       3.019       0.138         4.729         1.290
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  ERCTTXTSABU2341292020210 01              BB1: 3.4 0.30  0.73  3.07   632.   0.
  17.40  1.54  1.54     2623.      2083.      4706.    25.01    19.86    44.87
   3.751    2.979    6.730      16.489       0.069         4.178         1.140
  ERCTTXTSBLU2241302020110 02              LF2: 9.8 0.30  2.90  9.79   575.   0.
  26.40  1.54  1.54      232.      1218.      1451.     2.42    12.70    15.12
   0.363    1.905    2.268      21.922       0.074         1.477         0.403
  ERCTTXTSBLU2241302020110 02              LF1: 5.9 0.30  2.90  5.88   575.   0.
  26.40  1.54  1.54      837.         0.       837.     8.72     0.00     8.72
   1.308    0.000    1.308      12.645       0.026         0.852         0.232
  ERCTTXTSBLU2241302020410 02              LF2: 9.8 0.30  2.90  9.79  1140.   0.
  26.40  1.54  1.54     1391.      1098.      2489.    14.55    11.48    26.02
   2.182    1.722    3.904      37.734       0.127         2.543         0.693
  ERCTTXTSBLU2241302020410 02              LF1: 5.9 0.30  2.90  5.88  1140.   0.
  26.40  1.54  1.54        0.      1318.      1318.     0.00    13.78    13.78
   0.000    2.066    2.066      19.974       0.040         1.346         0.367
  ERCTTXTSBLU2242302020410 02              LF2: 9.8 0.30  2.90  9.79   565.   0.
  26.40  0.00  1.54        0.       544.       544.     0.00     5.93     5.93
   0.000    0.880    0.880       8.593       0.029         0.579         0.158
  ERCTTXTSBLU2242302020410 02              LF1: 5.9 0.30  2.90  5.88   565.   0.
  26.40  0.00  1.54        0.       653.       653.     0.00     7.11     7.11
   0.000    1.056    1.056      10.314       0.021         0.695         0.190
  ERCTTXTSBSU2341292020110 01              SB2: 6.5 0.32  0.69  6.29  1160.   0.
  17.40  1.54  1.54     4814.      3824.      8638.    46.94    37.28    84.22
   7.440    5.909   13.348      29.139       0.265         8.125         2.216
Oil/Gas Steam                  5
  ERCTTXSTHSU2021   000000 00              GAS      0.19  0.00  0.00  1078.   0.
  20.60  0.00  2.57        0.      1136.      1136.     0.00    11.31    11.31
   0.000    1.097    1.097       0.000       0.000         0.600         0.164
  ERCTTXSTHSU2221   000000 00              GAS      0.27  0.00  0.00  3693.   0.
  20.00  0.00  2.57        0.      1479.      1479.     0.00    14.47    14.47
   0.000    1.968    1.968       0.000       0.000         0.768         0.209
  ERCTTXSTHSU2321   000000 00              GAS      0.14  0.00  0.00   356.   0.
  14.70  0.00  2.57        0.       375.       375.     0.00     3.72     3.72
   0.000    0.260    0.260       0.000       0.000         0.197         0.054
  ERCTTXSTHSU2421   000000 00              GAS      0.32  0.00  0.00   795.   0.
  20.20  0.00  2.57        0.      1467.      1467.     0.00    14.25    14.25
   0.000    2.252    2.252       0.000       0.000         0.756         0.206
  ERCTTXSTHSU2521   000000 00              GAS      0.48  0.00  0.00  2276.   0.
  20.40  0.00  2.57        0.      3131.      3131.     0.00    30.69    30.69
   0.000    7.397    7.397       0.000       0.000         1.629         0.444
  ERCTTXSTLSU2021   000000 00              GAS      0.27  0.00  0.00   285.   0.
  20.70  0.00  2.57        0.       260.       260.     0.00     2.66     2.66
   0.000    0.364    0.364       0.000       0.000         0.141         0.039
  ERCTTXSTLSU2321   000000 00              GAS      0.12  0.00  0.00   405.   0.
  14.70  0.00  2.57        0.       427.       427.     0.00     4.27     4.27
   0.000    0.256    0.256       0.000       0.000         0.227         0.062
  ERCTTXSTLSU2521   000000 00              GAS      0.29  0.00  0.00   726.   0.
  20.20  0.00  2.57        0.       765.       765.     0.00     7.99     7.99
   0.000    1.167    1.167       0.000       0.000         0.424         0.116
  ERCTTXSTLSU3521   000000 00              GAS      0.11  0.00  0.00   204.   0.
```

```
  14.70  0.00  2.57        0.       215.       215.     0.00     2.20     2.20
   0.000    0.121    0.121       0.000       0.000         0.117         0.032
Oil/Gas Steam_Nox              6
  ERCTTXSTHSO2521   000000 00              GAS      0.16  0.00  0.00   116.   0.
  20.00  0.00  3.02        0.       122.       122.     0.00     1.18     1.18
   0.000    0.095    0.095       0.000       0.000         0.063         0.017
  ERCTTXSTHSO3521   000000 00              GAS      0.15  0.00  0.00   200.   0.
  20.00  0.00  3.02        0.       211.       211.     0.00     2.05     2.05
   0.000    0.154    0.154       0.000       0.000         0.109         0.030
  ERCTTXSTLSO2021   000000 00              GAS      0.14  0.00  0.00   940.   0.
  21.60  0.00  3.02        0.       991.       991.     0.00     9.93     9.93
   0.000    0.675    0.675       0.000       0.000         0.527         0.144
Nuclear                        7
  ERCT  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1185.   0.
  81.80  0.52  0.52     5661.      3990.      9651.    60.12    42.38   102.50
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCT  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1265.   0.
  92.40  0.48  0.48     5507.      4640.     10147.    55.88    47.09   102.98
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCT  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1185.   0.
  81.80  0.52  0.52     5232.      4073.      9305.    55.31    43.05    98.36
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCT  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1250.   0.
  92.40  0.48  0.48     5392.      4315.      9707.    56.57    45.27   101.84
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  ERCT  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   356.   0.
  15.50  0.00  0.00      431.       365.       796.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  ERCTTXCC   1922   000000 00              GAS      0.02  0.00  0.00  1108.   0.
  13.90  1.03  1.03     1083.      1714.      2797.     8.12    12.85    20.98
   0.081    0.129    0.210       0.000       0.000         1.113         0.304
  ERCTTXCC   1923   000000 00              GAS      0.16  0.00  0.00   463.   0.
  19.90  0.00  1.03        0.        79.        79.     0.00     0.82     0.82
   0.000    0.065    0.065       0.000       0.000         0.044         0.012
  ERCTTXCC   2313   000000 00              GAS      0.13  0.00  0.00     7.   0.
  14.90  1.03  1.03        2.         4.         5.     0.02     0.04     0.06
   0.001    0.003    0.004       0.000       0.000         0.003         0.001
  ERCTTXCC   2322   000000 00              GAS      0.02  0.00  0.00  4495.   0.
  13.90  1.03  1.03    13136.     11590.     24726.    98.52    86.92   185.45
   0.985    0.869    1.854       0.000       0.000         9.842         2.684
  ERCTTXCC   2513   000000 00              GAS      0.16  0.00  0.00    22.   0.
  19.90  1.03  1.03        5.        34.        39.     0.05     0.32     0.37
   0.004    0.026    0.029       0.000       0.000         0.020         0.005
  ERCTTXCC   2514   000000 00              GAS      0.16  0.00  0.00     3.   0.
  19.90  1.03  1.03        1.         2.         2.     0.01     0.02     0.03
   0.001    0.001    0.002       0.000       0.000         0.001         0.000
  ERCTTXCC   2523   000000 00              GAS      0.14  0.00  0.00   103.   0.
  19.90  1.03  1.03       23.       159.       182.     0.22     1.52     1.73
   0.015    0.105    0.120       0.000       0.000         0.092         0.025
  ERCTTXCC   2524   000000 00              GAS      0.10  0.00  0.00    36.   0.
  19.90  1.03  1.03        8.         7.        15.     0.10     0.08     0.17
   0.005    0.004    0.009       0.000       0.000         0.009         0.003
  ERCTTXCC   2722   000000 00              GAS      0.02  0.00  0.00  8847.   0.
  13.90  1.03  1.03    39456.     29788.     69244.   295.92   223.41   519.33
   2.959    2.234    5.193       0.000       0.000        27.561         7.517
  ERCTTXCC   3522   000000 00              GAS      0.02  0.00  0.00  2623.   0.
  13.90  1.03  1.03     8817.      9017.     17834.    66.13    67.63   133.76
   0.661    0.676    1.338       0.000       0.000         7.098         1.936
  ERCTTXCC   3523   000000 00              GAS      0.13  0.00  0.00   258.   0.
  13.90  1.03  1.03       58.       133.       191.     0.64     1.47     2.12
   0.042    0.097    0.139       0.000       0.000         0.112         0.031
IGCC                          10
Turbine                       11
```

```
  ERCTTXCT   1922   000000 00                GAS      0.08  0.00  0.00   980.   0.
   2.80  0.00  1.03        0.       169.       169.     0.00     1.84     1.84
   0.000    0.074    0.074       0.000       0.000         0.098         0.027
  ERCTTXCT   2114   000000 00                GAS      0.10  0.00  0.00     5.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  ERCTTXCT   2122   000000 00                GAS      0.08  0.00  0.00    85.   0.
   2.80  1.03  1.03       20.        44.        64.     0.21     0.48     0.70
   0.009    0.019    0.028       0.000       0.000         0.037         0.010
  ERCTTXCT   2214   000000 00                GAS      0.10  0.00  0.00    56.   0.
  11.20  0.00  1.03        0.        10.        10.     0.00     0.14     0.14
   0.000    0.007    0.007       0.000       0.000         0.007         0.002
  ERCTTXCT   2312   000000 00                GAS      0.10  0.00  0.00     7.   0.
   2.80  1.03  1.03        2.         4.         5.     0.02     0.04     0.05
   0.001    0.002    0.003       0.000       0.000         0.003         0.001
  ERCTTXCT   2313   000000 00                GAS      0.10  0.00  0.00    21.   0.
  11.20  1.03  1.03        5.         4.         8.     0.07     0.05     0.11
   0.003    0.002    0.006       0.000       0.000         0.006         0.002
  ERCTTXCT   2314   000000 00                GAS      0.10  0.00  0.00     4.   0.
  11.20  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  ERCTTXCT   2322   000000 00                GAS      0.09  0.00  0.00   460.   0.
   2.80  1.03  1.03      106.       238.       344.     1.20     2.69     3.90
   0.055    0.124    0.179       0.000       0.000         0.207         0.056
  ERCTTXCT   2323   000000 00                GAS      0.10  0.00  0.00   200.   0.
   2.80  1.03  1.03       46.        34.        81.     0.59     0.44     1.03
   0.030    0.022    0.052       0.000       0.000         0.055         0.015
  ERCTTXCT   2414   000000 00                GAS      0.10  0.00  0.00     7.   0.
  11.20  1.03  1.03        2.         1.         3.     0.02     0.02     0.04
   0.001    0.001    0.002       0.000       0.000         0.002         0.001
  ERCTTXCT   2512   000000 00                GAS      0.10  0.00  0.00     8.   0.
   3.80  1.03  1.03        2.         4.         6.     0.02     0.04     0.06
   0.001    0.002    0.003       0.000       0.000         0.003         0.001
  ERCTTXCT   2514   000000 00                GAS      0.10  0.00  0.00    27.   0.
  11.20  1.03  1.03        1.         5.         5.     0.01     0.07     0.08
   0.000    0.003    0.004       0.000       0.000         0.004         0.001
  ERCTTXCT   2722   000000 00                GAS      0.08  0.00  0.00   275.   0.
   2.80  1.03  1.03       64.       142.       206.     0.69     1.56     2.25
   0.028    0.062    0.090       0.000       0.000         0.119         0.033
  ERCTTXCT   3514   000000 00                GAS      0.10  0.00  0.00     1.   0.
   2.80  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCTTXCT   3522   000000 00                GAS      0.10  0.00  0.00   260.   0.
   2.80  1.03  1.03       60.       135.       195.     0.69     1.55     2.24
   0.035    0.079    0.114       0.000       0.000         0.119         0.032
  ERCTTXCT   3523   000000 00                GAS      0.10  0.00  0.00   502.   0.
   3.10  1.03  1.03      116.        86.       202.     1.43     1.06     2.49
   0.073    0.054    0.127       0.000       0.000         0.132         0.036
  ERCTTXCT   3524   000000 00                GAS      0.10  0.00  0.00   293.   0.
   3.30  0.00  1.03        0.        50.        50.     0.00     0.72     0.72
   0.000    0.037    0.037       0.000       0.000         0.038         0.010
Biomass                        12
Geothermal                     13
Landfill Gas                   14
  ERCT  LFGAS00     000000 00                WASTE    0.25  0.00  0.00    67.   0.
  78.60 10.48 10.48      300.       229.       528.     4.09     3.12     7.21
   0.503    0.384    0.887       0.000       0.000         0.000         0.000
Wind                           15
  ERCT  WIND 00     000000 00                NONE     0.00  0.00 71.00   703.   0.
  26.40  0.00  0.00     1465.       823.      2288.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
  ERCT  SOLAR00     000000 00                NONE     0.00  0.00 71.00     1.   0.
  47.00  0.00  0.00        0.         0.         0.     0.00     0.00     0.00
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other                18
  ERCT  OTHER00     000000 00              NONE     0.00  0.00  0.00    10.   0.
 103.60  0.00  0.00        44.        35.        79.     0.48     0.38     0.87
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                    19
  ERCTTXWASTE271    000000 00              WASTE    0.42  0.00  0.00     2.   0.
 103.60  0.00  0.00         9.         7.        16.     0.10     0.08     0.17
   0.020    0.016    0.036       0.000       0.000         0.000         0.000
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
Cgn_Gas                         23
  ERCTTXCGCT 1912   000000 00              GAS      0.10  0.00  0.00    17.   0.
   2.80  1.03  1.03         4.         3.         7.     0.04     0.03     0.07
   0.002    0.001    0.003       0.000       0.000         0.003         0.001
  ERCTTXCGCT 1922   000000 00              GAS      0.08  0.00  0.00  2033.   0.
   2.80  1.03  1.03       470.       350.       820.     4.92     3.67     8.59
   0.202    0.150    0.352       0.000       0.000         0.456         0.124
  ERCTTXCGCT 2312   000000 00              GAS      0.10  0.00  0.00    10.   0.
   2.80  1.03  1.03         2.        16.        18.     0.02     0.15     0.17
   0.001    0.007    0.009       0.000       0.000         0.009         0.002
  ERCTTXCGCT 2711   000000 00              GAS      0.10  0.00  0.00    22.   0.
   2.80  1.03  1.03        15.        34.        49.     0.13     0.29     0.42
   0.007    0.015    0.021       0.000       0.000         0.022         0.006
  ERCTTXCGCC 1911   000000 00              GAS      0.13  0.00  0.00    19.   0.
  13.90  1.03  1.03        13.        29.        42.     0.07     0.16     0.23
   0.004    0.010    0.015       0.000       0.000         0.012         0.003
  ERCTTXCGCC 1912   000000 00              GAS      0.13  0.00  0.00    28.   0.
  13.90  1.03  1.03         6.        14.        21.     0.05     0.11     0.15
   0.003    0.007    0.010       0.000       0.000         0.008         0.002
  ERCTTXCGCC 1913   000000 00              GAS      0.13  0.00  0.00    18.   0.
  14.90  0.00  1.03         0.         3.         3.     0.00     0.03     0.03
   0.000    0.002    0.002       0.000       0.000         0.002         0.000
  ERCTTXCGCC 1921   000000 00              GAS      0.13  0.00  0.00   368.   0.
  14.90  1.03  1.03        82.       569.       651.     0.51     3.55     4.06
   0.034    0.232    0.266       0.000       0.000         0.216         0.059
  ERCTTXCGCC 1922   000000 00              GAS      0.04  0.00  0.00  2500.   0.
  14.00  1.03  1.03      1456.      3867.      5322.    11.01    29.24    40.25
   0.237    0.629    0.865       0.000       0.000         2.136         0.583
  ERCTTXCGCC 1923   000000 00              GAS      0.13  0.00  0.00   110.   0.
  14.30  1.03  1.03        25.        19.        43.     0.23     0.17     0.40
   0.015    0.011    0.026       0.000       0.000         0.021         0.006
  ERCTTXCGCC 2313   000000 00              GAS      0.13  0.00  0.00     3.   0.
  14.00  1.03  1.03         1.         5.         5.     0.01     0.04     0.05
   0.000    0.003    0.003       0.000       0.000         0.003         0.001
  ERCTTXCGCC 2322   000000 00              GAS      0.02  0.00  0.00  1513.   0.
  13.90  1.03  1.03      3051.      3901.      6952.    22.88    29.26    52.14
   0.229    0.293    0.521       0.000       0.000         2.767         0.755
  ERCTTXCGCC 2323   000000 00              GAS      0.13  0.00  0.00   246.   0.
  13.90  1.03  1.03        55.       127.       182.     0.57     1.30     1.87
   0.037    0.085    0.122       0.000       0.000         0.099         0.027
  ERCTTXCGCC 2711   000000 00              GAS      0.13  0.00  0.00    81.   0.
  13.90  1.03  1.03       363.       278.       641.     1.98     1.52     3.49
   0.129    0.099    0.229       0.000       0.000         0.185         0.051
  ERCTTXCGCC 2722   000000 00              GAS      0.06  0.00  0.00   782.   0.
  13.90  1.03  1.03      1577.      2016.      3593.    12.28    15.70    27.98
   0.362    0.463    0.825       0.000       0.000         1.485         0.405
  ERCTTXCGCC 3513   000000 00              GAS      0.13  0.00  0.00    77.   0.
  14.90  1.03  1.03        17.       119.       136.     0.18     1.23     1.41
   0.012    0.081    0.092       0.000       0.000         0.075         0.020
  ERCTTXCGCC 3523   000000 00              GAS      0.13  0.00  0.00   217.   0.
  14.90  1.03  1.03        49.       336.       384.     0.48     3.30     3.78
   0.031    0.216    0.248       0.000       0.000         0.201         0.055
Cgn_Oil                         24
```

```
Cgn_Other                       25
  ERCTTXCGFWT192    000000 00              WASTE    0.42  0.00 20.87   162.   0.
 103.60  0.00  0.00        36.       249.       285.     0.21     1.48     1.69
   0.045    0.307    0.352       0.000       0.018         0.000         0.000
  ERCT  CGOTH00     000000 00              NONE     0.00  0.00  0.00     1.   0.
 103.60  0.00  0.00         4.         3.         8.     0.03     0.03     0.06
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
  ERCTTXTSASU1941291020310 01     SCR2     SB2: 6.5 0.05  1.00  1.75   650.   7.
  17.80  2.41  2.41     1177.      1377.      2555.    12.08    14.13    26.22
   0.308    0.360    0.669      13.108       0.023         2.529         0.690
  ERCTTXTSASU1941292020310 01     SCR1     SB2: 6.5 0.05  1.00  1.75  1210.   7.
  20.00  2.41  2.41     2250.      2564.      4814.    22.58    25.73    48.32
   0.565    0.643    1.208      24.159       0.042         4.662         1.271
  ERCTTXTSASU2341292020110 01     SCR1     SB2: 6.5 0.05  0.73  6.29   810.   8.
  19.80  2.45  2.45     3362.      2670.      6032.    34.27    27.22    61.49
   0.857    0.680    1.537      22.473       0.193         5.932         1.618
Ret.ExistScrub & SCR            41
  ERCTTXTSXLS2341302020103 02     SCR1     LF2: 9.8 0.05  0.39  5.48  1440.   7.
  36.00  3.80  3.80     5976.      4746.     10723.    61.28    48.67   109.95
   1.532    1.217    2.749      21.523       0.301        10.743         2.930
  ERCTTXTSXLS2342302020103 02     SCR1     LF2: 9.8 0.05  0.77  5.48   189.   7.
  36.40  3.81  3.81      784.       622.      1406.     8.72     6.93    15.64
   0.218    0.173    0.391       6.057       0.043         1.529         0.417
  ERCTTXTSXSS1941292020303 01     SCR1     SD2: 6.7 0.05  0.14  1.01   555.   7.
  36.00  3.82  3.82     1032.      1283.      2315.    10.54    13.10    23.64
   0.263    0.327    0.591       1.671       0.012         2.281         0.622
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
Ret.ExistScrub+GasR             47
Ret.GasReburn+Scrub             48
Ret.ACI                         49
Ret.ExistScrub&ACI              50
Ret.ExistSCR&ACI                51
Ret.ExistSNCR&ACI               52
Ret.ACI & SCR                   53
Ret.ExistScrub&ACI&SCR          54
Ret.ACI & SNCR                  55
Ret.ExistScrub&ACI&SNCR         56
Ret.ACI & Srub                  57
Ret.ExistSCR&ACI&Scrub          58
Ret.ExistSNCR&ACI&Scrub         59
Ret.ExistSNCR&ExistScrub&ACI    60
Ret.ExistSCR&ExistScrub&ACI     61
Ret.ExistNOx&ExistScrub&ACI     62
Ret.SCR & Scrub & ACI           63
Ret.SNCR & Scrub & ACI          64
Ret.O/G SCR                     65
```

```
Ret.O/G SNCR                    66
Ret.Nuclear (age 30+10 yrs)     67
Ret.Nuclear (age 40+20 yrs)     68
Ret. Biomass Cofiring           69
CT Early Retirement             70
CC Early Retirement             71
O/G Early Retirement            72
Coal Early Retirement           73
Nuke Early Retirement           74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2005, Region: MACE     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
  MACE  TSXBD0141031010107 01              BF2:11.1 0.59  0.18  5.10   155.   0.
  43.10  2.85  3.85      643.       428.      1071.     6.37     4.24    10.61
   1.895    0.818    2.712       0.954       0.027         0.988         0.269
  MACE  TSABA0141011020206 01              BF3:18.7 0.46  0.30 11.21   600.   0.
  43.50  1.91  3.91     2490.      1978.      4468.    23.65    18.78    42.43
   5.439    0.432    5.870       6.364       0.238         3.951         1.077
  MACE  TSZBD0241032020707 01              BF2:11.1 0.41  0.10  4.99   144.   0.
  43.10  2.85  3.85      598.       398.       995.     6.19     4.12    10.30
   1.268    0.547    1.816       0.510       0.029         0.959         0.262
  MACE  TSDBA0141011020206 01              BF3:18.7 0.84  0.30 16.82   642.   0.
  43.50  1.91  3.91     2664.      2116.      4781.    24.66    19.58    44.24
  10.356    0.822   11.178       6.636       0.372         4.120         1.124
Scrubbed Coal                  2
  MACE  TSZBS0241032020203 01              BF2:11.1 0.31  0.21  6.43   581.   0.
  42.90  2.94  2.94     2411.      1906.      4318.    24.06    19.03    43.09
   3.730    2.949    6.679       4.460       0.139         4.013         1.094
Unscrubbed Coal_NOx            3
  MACEDETSABN0241032020102 01              BA2: 5.2 0.31  1.10  3.31   403.   0.
  17.60  1.45  2.45     1401.       854.      2255.    14.41     8.79    23.20
   2.249    0.892    3.140      12.760       0.038         2.160         0.589
  MACE  TSBBN0231032020102 01              BA2: 5.2 0.39  1.10  3.31    84.   0.
  32.20  1.45  2.45      292.       178.       470.     3.02     1.84     4.86
   0.592    0.235    0.827       2.673       0.008         0.453         0.123
  MACE  TSBBN0241032020102 01              BA2: 5.2 0.34  1.10  3.31   167.   0.
  32.20  1.45  2.45      581.       461.      1042.     5.66     4.50    10.16
   0.954    0.492    1.447       5.588       0.017         0.946         0.258
  MACEDETSCBN0241032020102 01              BA2: 5.2 0.44  1.10  3.31   162.   0.
  26.60  1.45  2.45      563.       447.      1010.     5.20     4.13     9.34
   1.134    0.585    1.719       5.135       0.015         0.869         0.237
  MACEVATOLBO0332092020202 01              BA2: 5.2 0.31  1.10  4.65   176.   0.
  32.30  0.54  1.54      516.       373.       889.     6.12     4.42    10.55
```

```
   0.955    0.449    1.404       5.800       0.025         0.982         0.268
  MACEVATOLBO0341092020202 01              BA2: 5.2 0.35  1.10  4.65   306.   0.
  32.30  0.54  1.54     1064.       845.      1909.    10.28     8.16    18.44
   1.803    0.930    2.734      10.141       0.043         1.717         0.468
  MACE  TCOLC0141012050301 01              BA2: 5.2 0.49  1.10  0.57   200.   0.
  12.20  1.51  2.51      534.       424.       957.     5.55     4.41     9.96
   1.359    0.108    1.467       5.476       0.003         0.927         0.253
Unscrubbed Coal                 4
  MACE  TSCBU0131032020310 01              BA2: 5.2 0.39  1.10  0.57    80.   0.
  32.00  1.54  1.54      278.       169.       448.     2.86     1.75     4.61
   0.564    0.344    0.908       2.536       0.001         0.429         0.117
  MACEDETSCBU0231032020110 01              BA2: 5.2 0.40  1.10  3.31   178.   0.
  32.00  1.54  1.54      619.       377.       996.     6.17     3.76     9.93
   1.241    0.756    1.997       5.464       0.016         0.925         0.252
  MACENJTSLBU0112032020710 01              BA2: 5.2 0.28  1.10  5.17    23.   0.
  26.40  1.54  1.54       80.        64.       143.     0.92     0.73     1.65
   0.129    0.102    0.231       0.907       0.004         0.154         0.042
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  MACE  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1155.   0.
 141.50  0.98  0.98     4925.      4237.      9162.    53.10    45.68    98.79
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1093.   0.
 165.10  0.64  0.64     5560.      3383.      8943.    58.02    35.31    93.33
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1093.   0.
 165.10  0.64  0.64     5370.      3668.      9038.    56.63    38.68    95.31
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1134.   0.
  89.40  0.46  0.46     5298.      4160.      9458.    56.23    44.15   100.38
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1150.   0.
  89.40  0.46  0.46     5601.      3991.      9592.    58.85    41.93   100.78
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   605.   0.
 254.60  1.32  1.32     2237.      2222.      4459.    24.02    23.86    47.88
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1130.   0.
 141.50  0.98  0.98     4702.      4145.      8848.    50.26    44.30    94.56
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1131.   0.
 113.80  0.78  0.78     5753.      2886.      8639.    62.26    31.24    93.49
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  MACE  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   522.   0.
  15.50  0.00  0.00     2346.      1770.      4115.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  MACE  CC   0122   000000 00              GAS      0.04  0.00  0.00  3085.   0.
  13.90  1.03  1.03     3735.      1589.      5323.    28.83    12.26    41.09
   0.562    0.239    0.801       0.000       0.000         2.181         0.595
  MACE  CC   0123   000000 00              GAS      0.10  0.00  0.00   762.   0.
  14.50  0.00  1.03        0.       131.       131.     0.00     1.37     1.37
   0.000    0.070    0.070       0.000       0.000         0.073         0.020
  MACE  CC   0222   000000 00              GAS      0.04  0.00  0.00  1287.   0.
  13.90  1.03  1.03      865.      1957.      2822.     6.68    15.12    21.80
   0.120    0.272    0.392       0.000       0.000         1.157         0.315
IGCC                           10
Turbine                        11
  MACE  CT   0212   000000 00              GAS      0.10  0.00  0.00     3.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACEVACT   0312   000000 00              GAS      0.11  0.00  0.00     4.   0.
   4.10  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Biomass                          12
  MACE  BIOMS00  44 000000 00              B1-: 0.6 0.02  0.08  0.57     8.   0.
  44.80  5.36  5.36       35.        27.        61.     0.28     0.21     0.49
   0.003    0.002    0.005       0.020       0.000         0.000         0.000
Geothermal                       13
Landfill Gas                     14
  MACE  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    24.   0.
  78.60 10.48 10.48      107.        82.       189.     1.35     1.03     2.37
   0.166    0.126    0.292       0.000       0.000         0.000         0.000
Wind                             15
  MACE  WIND 00     000000 00              NONE     0.00  0.00 71.00    14.   0.
  26.40  0.00  0.00       20.        11.        31.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                        16
  MACE  FCELL00     000000 00              GAS      0.40  0.00  0.00    15.   0.
  15.00  2.06  2.06        3.         8.        11.     0.03     0.06     0.08
   0.005    0.011    0.017       0.000       0.000         0.004         0.001
Solar                            17
Non Fossil_Other                 18
  MACE  OTHER00     000000 00              NONE     0.00  0.00 71.00   257.   0.
 103.60  0.00  0.00     1133.       893.      2026.    12.46     9.83    22.29
   0.000    0.000    0.000       0.000       0.791         0.000         0.000
Fossil_Other                     19
Pump Storage                     20
  MACE  PUMPS00     000000 00              NONE     0.00  0.00 71.00  1280.   0.
   6.50  0.00  0.00      276.       199.       474.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                     21
Cgn_Coal                         22
  MACE  CGCOU0141012050710 01              BA2: 5.2 0.49  1.10  5.17   187.   0.
  11.70  1.54  1.54      634.       512.      1146.     5.30     4.28     9.58
   1.299    1.048    2.347       5.268       0.025         0.892         0.243
  MACE  CGCOU0211412050710 01              BA2: 5.2 0.40  1.10  5.17     8.   0.
  17.40  1.54  1.54       32.        26.        59.     0.29     0.23     0.52
   0.058    0.047    0.104       0.286       0.001         0.048         0.013
Cgn_Gas                          23
  MACE  CGCT 0111   000000 00              GAS      0.11  0.00  0.00     6.   0.
   2.80  0.00  1.03        0.         3.         3.     0.00     0.03     0.03
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  MACE  CGCT 0112   000000 00              GAS      0.11  0.00  0.00    13.   0.
   2.80  0.00  1.03        0.         2.         2.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  MACE  CGCT 0122   000000 00              GAS      0.08  0.00  0.00   170.   0.
   2.80  0.00  1.03        0.        27.        27.     0.00     0.29     0.29
   0.000    0.012    0.012       0.000       0.000         0.015         0.004
  MACE  CGCC 0111   000000 00              GAS      0.10  0.00  0.00    21.   0.
  13.90  1.03  1.03       42.        54.        96.     0.28     0.36     0.64
   0.015    0.019    0.033       0.000       0.000         0.034         0.009
  MACE  CGCC 0112   000000 00              GAS      0.10  0.00  0.00    16.   0.
  13.90  0.00  1.03        0.         8.         8.     0.00     0.07     0.07
   0.000    0.004    0.004       0.000       0.000         0.004         0.001
  MACE  CGCC 0113   000000 00              GAS      0.10  0.00  0.00    76.   0.
  13.90  0.00  1.03        0.        13.        13.     0.00     0.12     0.12
   0.000    0.006    0.006       0.000       0.000         0.006         0.002
  MACE  CGCC 0121   000000 00              GAS      0.10  0.00  0.00    41.   0.
  13.90  1.03  1.03       83.       106.       188.     0.55     0.70     1.25
   0.029    0.037    0.066       0.000       0.000         0.066         0.018
  MACE  CGCC 0122   000000 00              GAS      0.10  0.00  0.00  1517.   0.
  13.90  1.03  1.03      105.       781.       886.     0.84     6.26     7.10
   0.044    0.329    0.373       0.000       0.000         0.377         0.103
  MACE  CGCC 0123   000000 00              GAS      0.10  0.00  0.00   628.   0.
  14.20  0.00  1.03        0.       108.       108.     0.00     1.03     1.03
   0.000    0.054    0.054       0.000       0.000         0.054         0.015
  MACE  CGCC 0221   000000 00              GAS      0.19  0.00  0.00   188.   0.
```

```
  13.90  1.03  1.03      632.       485.      1117.     3.60     2.76     6.36
   0.333    0.255    0.588       0.000       0.000         0.337         0.092
  MACE  CGCC 0222   000000 00              GAS      0.02  0.00  0.00   725.   0.
  13.90  1.03  1.03     1462.      1121.      2583.    10.96     8.41    19.37
   0.110    0.084    0.194       0.000       0.000         1.028         0.280
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
Year: 2005, Region: MACW     (Emissions By Plant)
-------------------------------------------------
```

	NOx			SO2		MER	CO2		Carbon	
	Generation						Trillion			
	Emission			Emission		Emission	Emission		Emission	
							(lb/MBtu)	(lb/TBtu)	(MW)	$
/KWyr	VOM	Mill/KWh	(GWh)				(Btu)			
	(1000 Tons)			(1000 Tons)		(Tons)	(Mil Tonnes)		(Mil Tonnes)	
Unit						Fuel	NOx	SO2	MERCURY	Cap. Cap
. FO&M	WINT.	SUMM.	WINTER	SUMMER		Total	WINTER	SUMMER	Total	
WINTER	SUMMER	Total		Total		Total	Total		Total	
Scrubbed Coal_NOx				1						
MACW	TCOLA0241052050705	01				BG1: 8.0	0.11	0.25	4.66	520. 0.
23.60	2.91	3.91	0.		1714.	1714.	0.00	15.43	15.43	
0.000	0.085	0.085		1.928		0.006	1.437		0.392	
MACW	TCOLA0241052050705	01				BF2:11.1	0.11	0.15	6.43	520. 0.
23.60	2.91	3.91	2158.		0.	2158.	19.42	0.00	19.42	
1.068	0.000	1.068		1.457		0.062	1.809		0.493	
MACW	TSFBA0241412020105	01				BF3:18.7	0.45	0.15	6.35	650. 0.
38.30	2.91	3.91	2698.		2142.	4840.	26.39	20.96	47.35	
5.964	0.472	6.436		3.551		0.103	4.409		1.203	
Scrubbed Coal				2						
MACW	TCOLS0231412050304	01				BF3:18.7	0.40	0.72	7.48	32. 0.
23.10	2.94	2.94	133.		105.	238.	1.38	1.10	2.48	
0.277	0.220	0.497		0.892		0.009	0.231		0.063	
MACWPATSABS0241032020103						BF2:11.1	0.47	0.15	3.77	125. 0.
43.00	2.94	2.94	519.		345.	864.	5.44	3.62	9.06	
1.275	0.848	2.123		0.679		0.017	0.843		0.230	
Unscrubbed Coal_NOx				3						
MACW	TSHBC0241411020101	01				BE3:18.4	0.65	2.20	11.79	620. 0.
27.00	1.51	2.51	2573.		2044.	4617.	24.36	19.35	43.72	
7.882	0.629	8.511		48.087		0.258	4.071		1.110	
MACW	TSHBC0241412020101	01				BE3:18.4	0.44	2.20	11.79	2119. 0.
27.00	1.51	2.51	8794.		6985.	15779.	80.41	63.86	144.26	
17.689	1.405	19.094		158.691		0.850	13.434		3.664	
MACW	TSZBN0241031020102	01				BA2: 5.2	0.57	1.10	3.31	136. 0.
32.20	1.45	0.00	363.		0.	363.	3.62	0.00	3.62	
1.039	0.000	1.039		1.989		0.006	0.337		0.092	
Unscrubbed Coal				4						
MACW	TCOLU0211412050210	01				BD2:12.5	0.40	1.50	12.54	82. 0.
32.00	1.54	1.54	340.		270.	611.	3.54	2.81	6.35	
0.710	0.564	1.273		4.763		0.040	0.591		0.161	
MACW	TCOLU0231412050710	01				BA2: 5.2	0.40	1.10	5.17	82. 0.
11.70	1.54	1.54	219.		174.	392.	2.27	1.81	4.08	
0.456	0.362	0.818		2.245		0.011	0.380		0.104	
MACW	TCOLU0241412050710	01				BA2: 5.2	0.40	1.10	5.17	218. 0.
11.70	1.54	1.54	582.		462.	1043.	6.05	4.80	10.85	
1.213	0.963	2.176		5.968		0.028	1.011		0.276	
MACW	TOLBU0231032020110	01				BA2: 5.2	0.37	1.10	3.31	241. 0.
32.00	1.54	0.00	307.		0.	307.	3.18	0.00	3.18	
0.589	0.000	0.589		1.751		0.005	0.297		0.081	
MACWPATSABU0241032020110						BA2: 5.2	0.45	1.10	3.31	472. 0.
32.00	1.54	0.00	1259.		0.	1259.	12.72	0.00	12.72	
2.838	0.000	2.838		6.999		0.021	1.185		0.323	
MACW	TSCBU0241032020110	01				BA2: 5.2	0.40	1.10	3.31	1356. 0.
29.00	1.54	1.54	4714.		2873.	7587.	43.85	26.72	70.57	
8.792	5.358	14.150		38.816		0.117	6.572		1.792	
MACW	TSCBU0241032020310	01				BA2: 5.2	0.38	1.10	0.57	321. 0.
32.00	1.54	1.54	1021.		680.	1701.	9.53	6.35	15.87	
1.796	1.196	2.992		8.731		0.005	1.478		0.403	
Oil/Gas Steam				5						

```
Oil/Gas Steam_Nox              6
Nuclear                        7
  MACW  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1140.   0.
  92.40  0.57  0.57     5471.      3734.      9205.    57.47    39.23    96.70
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACW  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1146.   0.
  92.40  0.57  0.57     5830.      3337.      9167.    60.96    34.90    95.86
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACW  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   806.   0.
 181.30  0.93  0.93     3650.      2622.      6272.    40.69    29.23    69.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  MACW  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   649.   0.
  14.90  0.00  0.00     1512.       632.      2144.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  MACW  CC   0222   000000 00              GAS      0.02  0.00  0.00  2689.   0.
  13.90  1.03  1.03     1089.      1385.      2474.     8.17    10.38    18.55
   0.082    0.104    0.186       0.000       0.000         0.985         0.269
IGCC                          10
Turbine                       11
Biomass                       12
  MACW  BIOMS00  44 000000 00              B1-: 0.6 0.02  0.08  0.57    17.   0.
  44.80  5.36  5.36       74.        57.       131.     0.68     0.53     1.20
   0.007    0.005    0.012       0.048       0.000         0.000         0.000
Geothermal                    13
Landfill Gas                  14
  MACW  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     1.   0.
  78.60 10.48 10.48        4.         3.         8.     0.06     0.05     0.11
   0.008    0.006    0.013       0.000       0.000         0.000         0.000
Wind                          15
  MACW  WIND 00     000000 00              NONE     0.00  0.00 71.00    10.   0.
  26.40  0.00  0.00       17.        10.        27.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
  MACW  OTHER00     000000 00              NONE     0.00  0.00 65.04   119.   0.
 103.60  0.00  0.00      525.       414.       938.     5.77     4.55    10.32
   0.000    0.000    0.000       0.000       0.336         0.000         0.000
Fossil_Other                  19
Pump Storage                  20
  MACW  PUMPS00     000000 00              NONE     0.00  0.00 71.00   391.   0.
   6.50  0.00  0.00      243.        58.       301.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                  21
Cgn_Coal                      22
  MACW  CGCOU0211412050710 01              BA2: 5.2 0.40  1.10  5.17    44.   0.
  16.10  1.54  1.54      178.       144.       322.     1.56     1.26     2.81
   0.312    0.252    0.563       1.546       0.007         0.262         0.071
  MACW  CGCOU0231412050710 01              BA2: 5.2 0.40  1.10  5.17    82.   0.
  11.70  1.54  1.54      332.       268.       600.     2.66     2.15     4.81
   0.534    0.431    0.964       2.645       0.012         0.448         0.122
  MACW  CGCOU0232412050710 01              BA2: 5.2 0.40  1.10  5.17   120.   0.
  15.50  1.54  0.00      312.         0.       312.     3.39     0.00     3.39
   0.680    0.000    0.680       1.867       0.009         0.316         0.086
  MACW  CGCOU0241412050710 01              BA2: 5.2 0.40  1.10  5.17   101.   0.
  11.70  1.54  1.54      409.       276.       685.     3.50     2.36     5.86
   0.701    0.474    1.175       3.222       0.015         0.546         0.149
  MACW  CGCOS0231412050304 01              BF3:18.7 0.40  0.15  7.48    42.   0.
  35.60  2.94  2.94      170.       137.       307.     1.51     1.22     2.73
   0.303    0.245    0.548       0.205       0.010         0.255         0.069
  MACW  CGCOS0232412050304 01              BF3:18.7 0.40  0.72  7.48   100.   0.
  23.10  2.94  2.94      405.       274.       678.     4.41     2.98     7.38
   0.883    0.597    1.480       2.658       0.028         0.688         0.188
```

```
  MACW  CGCOD0231412050307 01              BF3:18.7 0.40  0.72  0.56    87.   0.
  23.30  2.84  3.84      352.       284.       636.     2.82     2.28     5.10
   0.566    0.297    0.864       1.837       0.001         0.475         0.130
Cgn_Gas                        23
  MACW  CGCT 0212   000000 00              GAS      0.13  0.00  0.00    33.   0.
   2.80  0.00  1.03        0.         6.         6.     0.00     0.06     0.06
   0.000    0.004    0.004       0.000       0.000         0.003         0.001
  MACW  CGCC 0213   000000 00              GAS      0.19  0.00  0.00    80.   0.
  13.90  0.00  1.03        0.        14.        14.     0.00     0.13     0.13
   0.000    0.012    0.012       0.000       0.000         0.007         0.002
  MACW  CGCC 0223   000000 00              GAS      0.19  0.00  0.00   206.   0.
  13.90  0.00  1.03        0.        35.        35.     0.00     0.33     0.33
   0.000    0.030    0.030       0.000       0.000         0.017         0.005
Cgn_Oil                        24
Cgn_Other                      25
  MACW  CGBIO00  44 000000 00              B1-: 0.6 0.02  0.08  0.57    11.   0.
  44.80  5.36  5.36       48.        37.        85.     0.38     0.29     0.68
   0.004    0.003    0.007       0.027       0.000         0.000         0.000
  MACW  CGOTH00     000000 00              NONE     0.00  0.00 17.04    25.   0.
 103.60  0.00  0.00      108.        84.       192.     0.45     0.35     0.80
   0.000    0.000    0.000       0.000       0.007         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  MACW  TSHBU0241412020110 01     SCR1     BE3:18.4 0.45  2.20 11.79  1700.   6.
  29.50  1.54  2.38     7055.      5603.     12659.    67.03    53.23   120.26
  14.947    1.331   16.278     132.285       0.709        11.199         3.054
Ret.ExistScrub & SCR           41
  MACW  TSYBS0241412020103 01     SCR1     BG3:28.7 0.44  0.20  9.77  1700.   6.
  43.00  2.94  3.78     5772.         0.      5772.    53.05     0.00    53.05
  11.723    0.000   11.723       5.305       0.259         4.940         1.347
  MACW  TSYBS0241412020103 01     SCR1     BF3:18.7 0.44  0.12  6.35  1700.   6.
  43.00  2.94  3.78     1283.      5603.      6887.    11.79    51.50    63.29
   2.606    1.287    3.894       3.797       0.086         5.894         1.607
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
```

```
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2005, Region: MACS     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
  MACS  TSEBC0241072020101 01              BA2: 5.2 0.45  1.10  3.31   324.   0.
  32.60  1.51  2.51     1126.       895.      2021.    10.30     8.18    18.48
   2.328    0.184    2.512      10.165       0.031         1.721         0.469
  MACSMDTSHBO0241081010302 01              BD2:12.5 0.78  1.50  1.38   380.   0.
  32.30  0.54  1.54     1321.       805.      2126.    13.48     8.22    21.70
   5.251    2.079    7.330      16.275       0.015         2.021         0.551
Unscrubbed Coal                4
  MACS  TSEBU0241072020110 01              BA2: 5.2 0.41  1.10  3.31   135.   0.
  32.00  1.54  1.54      360.       286.       646.     3.61     2.87     6.47
   0.736    0.585    1.321       3.560       0.011         0.603         0.164
  MACS  TSGBU0241082020110 01              BD2:12.5 0.36  1.50  8.03   546.   0.
  32.00  1.54  1.54      856.       631.      1487.     8.04     5.92    13.96
   1.466    1.081    2.548      10.469       0.056         1.300         0.355
  MACS  TSGBU0241082020110 01              BE3:18.4 0.36  2.20 11.79   546.   0.
  32.00  1.54  1.54      795.         0.       795.     7.46     0.00     7.46
   1.361    0.000    1.361       8.204       0.044         0.695         0.189
  MACS  TSGBU0241082020110 01              BE2:10.4 0.36  2.20  6.69   546.   0.
  32.00  1.54  1.54      248.       876.      1124.     2.32     8.23    10.55
   0.424    1.502    1.926      11.607       0.035         0.983         0.268
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  MACS  NUKE 00    9000000 00              NUC      0.00  0.00  0.00   875.   0.
 161.00  0.61  0.61     4352.      2860.      7212.    47.25    31.05    78.30
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACS  NUKE 00    9000000 00              NUC      0.00  0.00  0.00   850.   0.
 111.00  0.61  0.61     4141.      2712.      6854.    45.05    29.50    74.56
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  MACS  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00    18.   0.
  15.50  0.00  0.00       43.        16.        59.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  MACS  CC   0222   000000 00              GAS      0.08  0.00  0.00   142.   0.
  13.90  1.03  1.03       95.        73.       169.     0.81     0.62     1.43
   0.032    0.025    0.057       0.000       0.000         0.076         0.021
IGCC                            10
Turbine                         11
  MACS  CT   0211   000000 00              GAS      0.13  0.00  0.00     6.   0.
   2.80  1.03  1.03        4.         3.         7.     0.04     0.03     0.07
   0.002    0.002    0.004       0.000       0.000         0.004         0.001
  MACS  CT   0212   000000 00              GAS      0.10  0.00  0.00    45.   0.
   3.60  1.03  1.03       31.        23.        55.     0.30     0.23     0.53
   0.015    0.011    0.026       0.000       0.000         0.028         0.008
  MACS  CT   0214   000000 00              GAS      0.11  0.00  0.00   378.   0.
  11.20  0.00  1.03        0.        65.        65.     0.00     0.93     0.93
   0.000    0.051    0.051       0.000       0.000         0.049         0.013
  MACS  CT   0222   000000 00              GAS      0.11  0.00  0.00   578.   0.
   4.10  1.03  1.03      118.       175.       293.     1.30     1.93     3.23
   0.073    0.108    0.181       0.000       0.000         0.171         0.047
  MACS  CT   0223   000000 00              GAS      0.13  0.00  0.00   208.   0.
  11.20  0.00  1.03        0.        36.        36.     0.00     0.48     0.48
   0.000    0.030    0.030       0.000       0.000         0.025         0.007
  MACS  CT   0224   000000 00              GAS      0.11  0.00  0.00   920.   0.
   4.80  0.00  1.03        0.        73.        73.     0.00     1.04     1.04
   0.000    0.057    0.057       0.000       0.000         0.055         0.015
  MACSVACT   0322   000000 00              GAS      0.08  0.00  0.00   169.   0.
   2.80  1.03  1.03       39.        87.       127.     0.43     0.96     1.38
   0.017    0.038    0.055       0.000       0.000         0.073         0.020
Biomass                         12
Geothermal                      13
Landfill Gas                    14
  MACS  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     4.   0.
  78.60 10.48 10.48       18.        14.        32.     0.24     0.19     0.43
   0.030    0.023    0.053       0.000       0.000         0.000         0.000
Wind                            15
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  MACS  OTHER00     000000 00              NONE     0.00  0.00 71.00    55.   0.
 103.60  0.00  0.00      242.       191.       434.     2.67     2.10     4.77
   0.000    0.000    0.000       0.000       0.169         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
Cgn_Gas                         23
  MACS  CGCC 0223   000000 00              GAS      0.08  0.00  0.00   277.   0.
  13.90  1.03  1.03      169.       143.       312.     1.66     1.40     3.06
   0.066    0.056    0.123       0.000       0.000         0.163         0.044
Cgn_Oil                         24
Cgn_Other                       25
  MACS  CGOTH00     000000 00              NONE     0.00  0.00 71.00    54.   0.
 103.60  0.00  0.00      234.       181.       415.     0.98     0.76     1.74
   0.000    0.000    0.000       0.000       0.062         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
```

```
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
  MACS  TSEBC0241072020201 01     LO01     BF3:18.7 0.46  0.15 10.84  1264.  21.
  23.02  2.93  3.93        0.      2870.      2870.     0.00    29.38    29.38
   0.000    0.676    0.676       2.204       0.027         2.736         0.746
  MACS  TSEBC0241072020201 01     LO01     BF2:11.1 0.46  0.15  6.43  1264.  21.
  23.02  2.93  3.93     5245.      1296.      6541.    53.70    13.27    66.96
  12.270    0.305   12.575       5.022       0.180         6.236         1.701
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  MACSMDTSDBU0241081020110 01     SCR2     BE3:18.4 0.64  2.20 11.79  1847.   8.
  28.90  1.54  2.44        0.      1778.      1778.     0.00    16.22    16.22
   0.000    0.519    0.519      17.841       0.096         1.510         0.412
  MACSMDTSDBU0241081020110 01     SCR2     BE2:10.4 0.64  2.20  6.69  1847.   8.
  28.90  1.54  2.44     7665.      3322.     10987.    69.93    30.31   100.24
  22.518    0.970   23.488     110.260       0.335         9.334         2.546
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Year: 2005, Region: WUMS     (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  WUMSWITCOLS1231391020104 01              BD1: 5.1 0.80  0.57  2.79    80.   0.
  43.00  2.94  2.94      278.       221.       499.     2.89     2.30     5.19
   1.157    0.919    2.076       1.479       0.007         0.483         0.132
  WUMSWITOLBS1312162030304 01              BG1: 8.0 0.34  2.51  0.40    22.   0.
  43.00  2.94  2.94       91.        73.       164.     1.02     0.81     1.82
   0.172    0.137    0.308       2.290       0.000         0.170         0.046
  WUMSWITSGBS1231392020104 01              BD1: 5.1 0.30  0.72  2.79    80.   0.
  43.00  2.94  2.94      278.       221.       499.     2.86     2.27     5.13
   0.429    0.340    0.769       1.842       0.007         0.477         0.130
  WUMS  TSXBS0432392020304 01              BD1: 5.1 0.31  0.08  0.25    44.   0.
  35.60  2.94  2.94      117.        93.       211.     1.41     1.12     2.53
   0.218    0.173    0.392       0.099       0.000         0.236         0.064
Unscrubbed Coal_NOx            3
  WUMSWITSDSO1332392020102 01              SB1: 4.5 0.45  0.68  4.41    82.   0.
  32.30  1.54  1.54      285.       226.       511.     3.06     2.43     5.49
   0.685    0.544    1.230       1.878       0.012         0.530         0.144
Unscrubbed Coal                4
  WUMS  TCOLU0411392020710 01              BB2: 4.1 0.46  1.00  4.10    25.   0.
  32.00  1.54  1.54      104.        82.       186.     1.08     0.86     1.94
   0.248    0.197    0.445       0.968       0.004         0.180         0.049
  WUMSWITCOLU1311162040310 01              SB2: 6.5 0.37  1.00  1.75    44.   0.
  32.00  1.54  1.54      183.       145.       328.     1.90     1.51     3.41
   0.353    0.281    0.634       1.704       0.003         0.329         0.090
  WUMSWITCOLU1311162050710 01              SB2: 6.5 0.37  1.00  6.48    22.   0.
  32.00  1.54  1.54       91.        73.       164.     0.95     0.75     1.70
   0.177    0.140    0.317       0.852       0.006         0.164         0.045
  WUMSWITCOLU1331392020110 01              BB2: 4.1 0.46  1.00  2.62    56.   0.
  32.00  1.54  1.54      195.       155.       349.     2.02     1.61     3.63
   0.466    0.370    0.836       1.816       0.005         0.338         0.092
  WUMSWITOLBU1311161020710 01              SB2: 6.5 0.78  1.00  6.48    14.   0.
  32.00  1.54  1.54       58.        46.       104.     0.60     0.48     1.08
   0.235    0.187    0.422       0.542       0.004         0.105         0.029
  WUMSWITOLBU1312162020210 01              SD2: 6.7 0.35  1.40  6.30    24.   0.
  32.00  1.54  1.54      100.        79.       179.     1.37     1.09     2.47
   0.244    0.194    0.438       1.726       0.008         0.238         0.065
  WUMSWITSCSU1242162020110 01              SB2: 6.5 0.30  0.71  6.29  1200.   0.
  17.40  1.54  1.54     4980.      3955.      8936.    53.82    42.74    96.56
   8.072    6.411   14.484      34.374       0.303         9.316         2.541
  WUMSWITSCSU1341161010110 01              SB2: 6.5 0.50  1.00  6.29   342.   0.
  26.40  1.54  1.54     1419.      1127.      2547.    13.65    10.84    24.50
   3.420    2.716    6.136      12.248       0.077         2.363         0.645
  WUMSWITSCSU1341162020110 01              SB2: 6.5 0.31  0.68  6.29   525.   0.
  17.40  1.54  1.54     2179.      1730.      3909.    22.29    17.71    40.00
   3.511    2.789    6.300      13.520       0.126         3.859         1.052
  WUMSWITSCSU1341162020210 01              SB2: 6.5 0.30  1.00  6.09   525.   0.
  26.40  1.54  1.54     2179.      1730.      3909.    22.40    17.79    40.19
   3.360    2.669    6.029      20.096       0.122         3.878         1.058
```

```
  WUMSWITSCSU1341162020510 01                SB2: 6.5 0.20  0.65  1.75   334.   0.
  17.40  1.54  1.54     1386.      1101.      2487.    14.12    11.21    25.33
   1.426    1.132    2.558       8.282       0.022          2.443          0.666
  WUMSWITSCSU1342162020110 01                SB2: 6.5 0.23  0.65  6.29   402.   0.
  17.40  1.54  1.54     1668.      1325.      2993.    17.72    14.07    31.79
   2.064    1.639    3.704      10.332       0.100          3.067          0.836
  WUMSWITSDBU1241162020110 01                BB2: 4.1 0.31  0.78  2.62  1135.   0.
  32.00  1.54  1.54     4710.      3741.      8452.    41.91    33.29    75.20
   6.497    5.160   11.656      29.329       0.099          7.003          1.910
  WUMSWITSDSU1331392020110 01                SB1: 4.5 0.20  1.00  4.41    87.   0.
  32.00  1.54  1.54      232.       240.       472.     2.41     2.49     4.90
   0.244    0.253    0.497       2.451       0.011          0.473          0.129
  WUMSWITSDSU1332392020110 01                SB1: 4.5 0.43  0.78  4.41   183.   0.
  32.00  1.54  1.54      488.       505.       993.     5.84     6.05    11.89
   1.250    1.294    2.544       4.642       0.026          1.147          0.313
  WUMSWITSDSU1341392010210 01                SB1: 4.5 0.41  0.68  4.55   113.   0.
  32.00  1.54  1.54      393.       312.       705.     4.09     3.25     7.33
   0.832    0.660    1.492       2.500       0.017          0.707          0.193
  WUMSWITSDSU1342392010210 01                SB1: 4.5 0.41  0.70  4.55   113.   0.
  32.00  1.54  1.54      393.       312.       705.     4.22     3.35     7.57
   0.859    0.682    1.541       2.650       0.017          0.731          0.199
  WUMSWITSGBU1231392020110 01                BB2: 4.1 0.34  1.00  2.62   166.   0.
  32.00  1.54  1.54      577.       458.      1035.     5.96     4.73    10.69
   1.016    0.807    1.822       5.343       0.014          0.995          0.271
  WUMSWITSGBU1232392020310 01                BB2: 4.1 0.47  1.00  0.45   280.   0.
  26.40  1.54  1.54      747.       773.      1520.     8.74     9.04    17.78
   2.049    2.121    4.169       8.890       0.004          1.656          0.452
  WUMSWITSHBU1332162010110 01                SB2: 6.5 0.43  1.00  6.29   235.   0.
  32.00  1.54  1.54      817.       775.      1592.     9.69     9.19    18.88
   2.098    1.989    4.087       9.439       0.059          1.821          0.497
  WUMSWITSHBU1332162020110 01                SB2: 6.5 0.36  1.00  6.29    98.   0.
  32.00  1.54  1.54      341.       305.       645.     4.13     3.69     7.82
   0.736    0.659    1.395       3.908       0.025          0.754          0.206
  WUMS  TSHSU0432392020210 01                SB1: 4.5 0.32  1.00  4.28   258.   0.
  17.40  1.54  1.54      688.       381.      1069.     7.91     4.38    12.29
   1.278    0.707    1.986       6.147       0.026          1.186          0.323
  WUMS  TSJBU0431392020110 01                BB2: 4.1 0.41  1.00  2.62   177.   0.
  26.40  1.54  1.54      615.       375.       990.     6.50     3.96    10.47
   1.333    0.813    2.146       5.234       0.014          0.975          0.266
  WUMS  TSJBU0431392020310 01                BB1: 3.4 0.40  1.00  0.38    37.   0.
  32.00  1.54  1.54       54.         0.        54.     0.56     0.00     0.56
   0.111    0.000    0.111       0.280       0.000          0.052          0.014
  WUMS  TSJBU0431392020310 01                BB2: 4.1 0.40  1.00  0.45    37.   0.
  32.00  1.54  1.54       75.        78.       153.     0.78     0.82     1.59
   0.154    0.161    0.315       0.797       0.000          0.148          0.040
  WUMS  TSJBU0432392020310 01                BB2: 4.1 0.40  1.00  0.45   116.   0.
  32.00  1.54  1.54      403.       246.       649.     4.29     2.62     6.91
   0.850    0.518    1.368       3.456       0.002          0.644          0.176
  WUMS  TSKBU0411391020710 01                BB2: 4.1 0.85  1.00  4.10    47.   0.
  29.50  1.54  1.54      195.       155.       350.     2.03     1.61     3.64
   0.865    0.687    1.552       1.820       0.007          0.339          0.092
  WUMSWITSLBU1341392020110 01                BB2: 4.1 0.42  0.48  2.62   144.   0.
  32.00  1.54  1.54      598.       475.      1072.     6.08     4.83    10.91
   1.274    1.012    2.286       2.619       0.014          1.016          0.277
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  WUMS  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   512.   0.
 195.70  0.98  0.98     2408.      1564.      3972.    25.04    16.27    41.31
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
  WUMS  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   514.   0.
 195.70  0.98  0.98     2332.      1655.      3987.    24.50    17.39    41.89
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
  WUMS  NUKE 00    7000000 00                NUC      0.00  0.00  0.00   498.   0.
 163.50  0.83  0.83     1837.      1794.      3631.    20.21    19.74    39.95
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  WUMS  HYDRO00     000000 00                HYDRO    0.00  0.00  0.00   354.   0.
  15.40  0.00  0.00     1007.       676.      1683.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  WUMSWICC   1322   000000 00                GAS      0.12  0.00  0.00   307.   0.
  13.90  1.03  1.03      419.       158.       577.     3.56     1.34     4.91
   0.214    0.081    0.294       0.000       0.000         0.260         0.071
IGCC                            10
Turbine                         11
  WUMS  CT   0413   000000 00                GAS      0.10  0.00  0.00    23.   0.
   2.80  0.00  1.03        0.         4.         4.     0.00     0.05     0.05
   0.000    0.002    0.002       0.000       0.000         0.003         0.001
  WUMSWICT   1223   000000 00                GAS      0.10  0.00  0.00   212.   0.
   2.80  0.00  1.03        0.        20.        20.     0.00     0.26     0.26
   0.000    0.013    0.013       0.000       0.000         0.014         0.004
  WUMSWICT   1312   000000 00                GAS      0.08  0.00  0.00    18.   0.
   3.00  1.03  1.03       12.         9.        22.     0.14     0.10     0.24
   0.006    0.004    0.010       0.000       0.000         0.013         0.003
  WUMSWICT   1322   000000 00                GAS      0.08  0.00  0.00  1221.   0.
   2.80  1.03  1.03      479.       372.       851.     5.23     4.06     9.30
   0.209    0.163    0.372       0.000       0.000         0.493         0.135
  WUMS  CT   8     (a)                      GAS      0.08  0.00  0.00   266.  55.
   9.80  0.00  3.91        0.        45.        45.     0.00     0.49     0.49
   0.000    0.020    0.020       0.000       0.000         0.026         0.007
Biomass                         12
  WUMS  BIOMS00  45 000000 00                B1-: 0.6 0.02  0.08  0.57    12.   0.
  44.80  5.36  5.36       52.        40.        92.     0.42     0.32     0.74
   0.004    0.003    0.007       0.030       0.000         0.000         0.000
Geothermal                      13
Landfill Gas                    14
  WUMS  LFGAS00     000000 00                WASTE    0.25  0.00  0.00    14.   0.
  78.60 10.48 10.48       63.        48.       110.     0.85     0.65     1.51
   0.105    0.080    0.185       0.000       0.000         0.000         0.000
Wind                            15
  WUMS  WIND 00     000000 00                NONE     0.00  0.00 71.00    13.   0.
  26.40  0.00  0.00       20.        11.        32.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
  WUMSWICGCOU1211162050710 01                SB2: 6.5 0.37  1.00  6.48    11.   0.
  11.70  1.54  1.54       45.        36.        80.     0.36     0.29     0.65
   0.066    0.054    0.120       0.323       0.002         0.062         0.017
  WUMSWICGCOU1311162050710 01                SB2: 6.5 0.37  1.00  6.48     4.   0.
  32.00  1.54  1.54       16.        13.        29.     0.15     0.12     0.27
   0.028    0.023    0.051       0.136       0.001         0.026         0.007
Cgn_Gas                         23
Cgn_Oil                         24
Cgn_Other                       25
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
```

```
Rep.Coal-IGCC                 36
Ret.Scrubber                  37
Ret.ExistSCR & Scrub          38
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
Ret.ExistScrub & SCR          41
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2005, Region: MANO     (Emissions By Plant)
--------------------------------------------------
```

	NOx	SO2	MER	CO2	Carbon
	Generation			Trillion	
	Emission	Emission	Emission	Emission	Emission
				(lb/MBtu)	(lb/TBtu)
	(MW)	$ /KWyr	VOM Mill/KWh	(GWh)	(Btu)
	(1000 Tons)	(1000 Tons)	(Tons)	(Mil Tonnes)	(Mil Tonnes)

```
     Unit                                  Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  MANO  TCOLA0411182020105 01              BG1: 8.0 0.11  0.25  2.73    18.   0.
```

```
  23.60  2.91  3.91       75.        59.       134.     0.67     0.53     1.21
   0.037    0.003    0.040       0.151       0.001         0.112         0.031
  MANO  TCOLD0431182050307 01              BF1: 6.8 0.43  0.15  0.20    42.   0.
  23.30  2.85  3.85      174.       138.       313.     1.81     1.44     3.25
   0.389    0.201    0.590       0.244       0.000         0.303         0.083
Scrubbed Coal                     2
  MANO  TOLBS0432191010103 01              BG1: 8.0 0.51  0.25  3.70    86.   0.
  42.70  2.94  2.94      357.       237.       594.     3.98     2.65     6.63
   1.016    0.676    1.691       0.829       0.012         0.618         0.168
  MANO  TOLBS0432192010203 01              BG1: 8.0 0.47  0.25  4.66    88.   0.
  42.70  2.94  2.94      365.       290.       655.     4.08     3.24     7.33
   0.953    0.757    1.711       0.916       0.017         0.682         0.186
  MANOILTSGBS0412191020703 01              BG1: 8.0 0.97  5.04  4.66    22.   0.
  43.00  2.94  2.94       91.        73.       164.     1.08     0.86     1.93
   0.522    0.415    0.937       4.871       0.005         0.180         0.049
  MANO  TSXBS0441192020103 01              BG1: 8.0 0.34  0.25  2.73   190.   0.
  35.60  2.94  2.94      789.       626.      1415.     8.32     6.61    14.93
   1.398    1.111    2.509       1.867       0.020         1.391         0.379
  MANO  TSYBS0441191010103 01              BF1: 6.8 0.58  0.60  3.14   170.   0.
  35.60  2.94  2.94      706.       360.      1066.     7.41     3.78    11.19
   2.134    1.089    3.223       3.357       0.018         1.042         0.284
Unscrubbed Coal_NOx               3
  MANO  TSCSO0441182010102 01              SB2: 6.5 0.45  0.68  6.29   292.   0.
  32.30  0.54  1.54     1212.       806.      2018.    11.83     7.87    19.71
   2.680    1.161    3.842       6.700       0.062         1.901         0.519
  MANO  TSEBC0441181010101 01              BB2: 4.1 0.73  1.00  2.62   554.   0.
  27.00  1.51  2.51     1478.      1174.      2652.    15.13    12.02    27.15
   5.553    0.439    5.991      13.574       0.036         2.528         0.689
Unscrubbed Coal                   4
  MANO  TCOLU0442192020110 01              BE1: 6.1 0.22  2.20  3.89   102.   0.
  32.00  1.54  1.54      272.       216.       488.     3.07     2.44     5.51
   0.336    0.267    0.603       6.059       0.011         0.513         0.140
  MANOMOTCOLU0511282050710 01              SD2: 6.7 0.48  1.40  6.70    17.   0.
  32.00  1.54  1.54       71.        56.       127.     0.73     0.58     1.32
   0.175    0.139    0.315       0.922       0.004         0.127         0.035
  MANOMOTOLBU0532281010110 01              SB2: 6.5 0.62  1.00  6.29    49.   0.
  32.00  1.54  1.54      203.       135.       339.     2.23     1.48     3.71
   0.687    0.457    1.143       1.853       0.012         0.358         0.098
  MANO  TSABU0441182020110 01              BB2: 4.1 0.31  1.00  2.62   555.   0.
  17.40  1.54  1.54     1929.      1532.      3462.    18.08    14.36    32.44
   2.839    2.255    5.094      16.222       0.043         3.021         0.824
  MANOMOTSABU0541252020110 01              SB2: 6.5 0.22  1.00  6.29  1158.   0.
  21.40  1.54  1.54     4712.      3692.      8405.    48.03    37.63    85.66
   5.235    4.102    9.337      42.830       0.269         8.264         2.254
  MANO  TSASU0441202020110 01              SB2: 6.5 0.29  0.68  6.29   169.   0.
  32.00  1.54  1.54      451.       358.       809.     4.72     3.75     8.47
   0.680    0.540    1.220       2.881       0.027         0.818         0.223
  MANOILTSBBU0441181010110 01              BB2: 4.1 0.62  1.00  2.62   900.   0.
  28.50  1.54  1.54     2084.       565.      2648.    20.58     5.58    26.16
   6.411    1.737    8.148      13.078       0.034         2.436         0.664
  MANO  TSBSU0432172010110 01              SB1: 4.5 0.37  0.69  4.41   100.   0.
  32.00  1.54  1.54      267.       116.       382.     3.07     1.33     4.40
   0.569    0.247    0.816       1.513       0.010         0.424         0.116
  MANO  TSBSU0432172010110 01              SB2: 6.5 0.37  0.69  6.29   100.   0.
  32.00  1.54  1.54        0.        96.        96.     0.00     1.11     1.11
   0.000    0.205    0.205       0.381       0.003         0.107         0.029
  MANO  TSBSU0441172020110 01              SB1: 4.5 0.31  0.72  4.41  2672.   0.
  32.00  1.54  1.54    11089.      7378.     18467.   107.18    71.30   178.48
  16.720   11.123   27.843      64.521       0.394        17.220         4.696
  MANO  TSBSU0441172020210 01              SB1: 4.5 0.30  0.69  4.28   579.   0.
  32.00  1.54  1.54     2403.       669.      3072.    23.11     6.44    29.55
   3.501    0.975    4.476      10.238       0.063         2.851         0.777
  MANO  TSBSU0441172020210 01              SB2: 6.5 0.30  0.69  6.09   579.   0.
  32.00  1.54  1.54        0.       929.       929.     0.00     8.94     8.94
   0.000    1.354    1.354       3.098       0.027         0.862         0.235
```

MANO TSCSU0441182010110 01 SB2: 6.5 0.46 0.63 6.29 999. 0.
28.10 1.54 1.54 3473. 2117. 5590. 35.41 21.58 57.00
8.198 4.996 13.195 18.011 0.179 5.499 1.500
MANO TSCSU0441202020110 01 SB2: 6.5 0.27 0.68 6.29 676. 0.
32.00 1.54 1.54 1803. 1432. 3236. 18.47 14.67 33.15
2.466 1.959 4.425 11.269 0.104 3.198 0.872
MANO TSCSU0442182010110 01 SB2: 6.5 0.47 0.63 6.29 700. 0.
26.40 1.54 1.54 1867. 1033. 2901. 20.39 11.29 31.68
4.823 2.669 7.492 10.010 0.100 3.056 0.833
MANO TSCSU0442202020110 01 SB2: 6.5 0.27 0.68 6.29 169. 0.
32.00 1.54 1.54 451. 358. 809. 4.80 3.81 8.61
0.648 0.514 1.162 2.927 0.027 0.831 0.227
MANOILTSDBU0441191020110 01 BE1: 6.1 0.63 2.20 3.89 361. 0.
26.40 1.54 1.54 1255. 533. 1788. 12.11 5.14 17.25
3.795 1.612 5.407 18.971 0.034 1.606 0.438
MANOILTSDBU0441192020110 01 BE1: 6.1 0.49 2.20 3.89 262. 0.
26.40 1.54 1.54 911. 555. 1466. 9.08 5.54 14.62
2.217 1.351 3.568 16.083 0.028 1.362 0.371
MANOMOTSDBU0541252020110 01 SB2: 6.5 0.20 1.00 6.29 2300. 0.
26.40 1.54 1.54 7996. 6350. 14346. 82.34 65.40 147.74
8.399 6.670 15.069 73.869 0.464 14.254 3.887
MANO TSEBU0442181010110 01 BB2: 4.1 0.73 1.00 2.62 554. 0.
32.00 1.54 0.00 1478. 0. 1478. 15.75 0.00 15.75
5.781 0.000 5.781 7.876 0.021 1.467 0.400
MANO TSESU0441172010110 01 SB1: 4.5 0.42 0.76 4.41 303. 0.
32.00 1.54 1.54 1257. 350. 1608. 11.72 3.26 14.99
2.444 0.681 3.125 5.688 0.033 1.446 0.394
MANO TSESU0441172010110 01 SB2: 6.5 0.42 0.76 6.29 303. 0.
32.00 1.54 1.54 0. 486. 486. 0.00 4.53 4.53
0.000 0.945 0.945 1.721 0.014 0.437 0.119
MANO TSESU0441172020310 01 SB2: 6.5 0.32 0.68 1.75 187. 0.
32.00 1.54 1.54 776. 616. 1392. 7.32 5.81 13.14
1.175 0.933 2.108 4.440 0.011 1.267 0.346
MANOMOTSFBU0542251010110 01 SB2: 6.5 0.77 1.00 6.29 952. 0.
29.20 1.54 1.54 2540. 1982. 4522. 27.46 21.43 48.89
10.599 8.272 18.871 24.444 0.154 4.717 1.286
MANOMOTSGBU0511271040310 01 BB2: 4.1 0.52 1.00 0.45 14. 0.
32.00 1.54 1.54 58. 46. 104. 0.58 0.46 1.05
0.153 0.121 0.274 0.523 0.000 0.097 0.027
MANOMOTSGBU0511272020710 01 BB2: 4.1 0.27 1.00 4.10 2. 0.
32.00 1.54 1.54 8. 7. 15. 0.08 0.07 0.15
0.011 0.009 0.020 0.075 0.000 0.014 0.004
MANOMOTSGBU0531272040310 01 BB2: 4.1 0.49 1.00 0.45 57. 0.
32.00 1.54 1.54 237. 157. 394. 2.38 1.58 3.96
0.581 0.387 0.968 1.979 0.001 0.368 0.100
MANO TSJBU0432252020210 01 SB2: 6.5 0.38 1.00 6.09 96. 0.
32.00 1.54 1.54 334. 203. 537. 3.58 2.18 5.76
0.671 0.409 1.079 2.878 0.018 0.555 0.151
MANO TSJBU0441252020110 01 SB2: 6.5 0.35 1.00 6.29 372. 0.
32.00 1.54 1.54 1544. 974. 2518. 15.41 9.72 25.13
2.735 1.725 4.461 12.565 0.079 2.425 0.661
MANO TSJBU0441252020210 01 BB2: 4.1 0.30 1.00 3.69 428. 0.
17.40 1.54 1.54 1488. 907. 2395. 15.69 9.56 25.25
2.353 1.434 3.787 12.625 0.047 2.351 0.641
MANO TSKBU0441181010110 01 BB2: 4.1 0.82 1.00 2.62 1156. 0.
26.40 1.54 0.00 3084. 0. 3084. 31.20 0.00 31.20
12.823 0.000 12.823 15.599 0.041 2.905 0.792
MANO TSKBU0441182020110 01 BB2: 4.1 0.34 1.00 2.62 595. 0.
26.40 1.54 1.54 2469. 955. 3424. 22.80 8.82 31.62
3.877 1.500 5.376 15.812 0.041 2.945 0.803
MANO TSKBU0441182020110 01 BE1: 6.1 0.34 2.20 3.89 595. 0.
26.40 1.54 1.54 0. 688. 688. 0.00 6.35 6.35
0.000 1.080 1.080 6.986 0.012 0.591 0.161
MANO TSXBU0441192020110 01 BE1: 6.1 0.29 2.20 3.89 672. 0.
27.40 1.54 1.54 2336. 1424. 3760. 22.66 13.81 36.47

```
   3.319    2.023    5.342      40.114       0.071         3.396         0.926
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  MANO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1072.   0.
 184.60  1.32  1.32     4576.      3932.      8508.    45.89    39.44    85.33
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1182.   0.
  91.60  0.51  0.51     5678.      4336.     10014.    58.45    44.64   103.09
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1175.   0.
  91.60  0.51  0.51     5619.      4310.      9929.    57.84    44.37   102.22
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1199.   0.
  88.40  0.50  0.50     5758.      4051.      9809.    59.88    42.12   102.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1191.   0.
  88.40  0.50  0.50     5758.      4124.      9882.    58.68    42.03   100.71
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1128.   0.
 112.50  0.78  0.78     5556.      4088.      9644.    58.81    43.27   102.08
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1131.   0.
 112.50  0.78  0.78     5173.      4145.      9318.    55.44    44.41    99.85
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1154.   0.
  87.60  0.57  0.57     5407.      3869.      9276.    56.56    40.47    97.03
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   850.   0.
 196.50  0.86  0.86     4215.      3034.      7249.    46.96    33.79    80.75
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   855.   0.
 188.00  0.94  0.94     4066.      3136.      7203.    44.51    34.33    78.84
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   855.   0.
 188.00  0.94  0.94     3846.      3033.      6878.    42.17    33.26    75.44
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   850.   0.
 196.50  0.86  0.86     4163.      2525.      6688.    46.26    28.06    74.32
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  MANO  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   362.   0.
  15.50  0.00  0.00     1079.       747.      1826.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  MANO  CC   0413   000000 00              GAS      0.10  0.00  0.00    20.   0.
  13.90  0.00  1.03        0.         3.         3.     0.00     0.04     0.04
   0.000    0.002    0.002       0.000       0.000         0.002         0.001
  MANO  CC   0422   000000 00              GAS      0.02  0.00  0.00  3078.   0.
  13.90  1.03  1.03      566.      1585.      2151.     4.25    11.89    16.13
   0.042    0.119    0.161       0.000       0.000         0.856         0.233
  MANOMOCC   0522   000000 00              GAS      0.02  0.00  0.00   260.   0.
  13.90  0.00  1.03        0.       134.       134.     0.00     1.00     1.00
   0.000    0.010    0.010       0.000       0.000         0.053         0.015
IGCC                          10
Turbine                       11
  MANO  CT   0411   000000 00              GAS      0.10  0.00  0.00     3.   0.
  11.20  0.00  1.03        0.         1.         1.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  CT   0412   000000 00              GAS      0.09  0.00  0.00   191.   0.
   3.50  0.00  1.03        0.        33.        33.     0.00     0.35     0.35
   0.000    0.016    0.016       0.000       0.000         0.019         0.005
  MANO  CT   0422   000000 00              GAS      0.08  0.00  0.00  9496.   0.
   2.90  0.00  1.03        0.       705.       705.     0.00     7.69     7.69
   0.000    0.315    0.315       0.000       0.000         0.408         0.111
```

```
  MANOMOCT   0512   000000 00                GAS      0.10  0.00  0.00    37.   0.
   4.00  0.00  1.03        0.         6.         6.     0.00     0.07     0.07
   0.000    0.003    0.003       0.000       0.000         0.003         0.001
  MANOMOCT   0522   000000 00                GAS      0.08  0.00  0.00  1002.   0.
   2.80  0.00  1.03        0.       173.       173.     0.00     1.89     1.89
   0.000    0.075    0.075       0.000       0.000         0.100         0.027
Biomass                          12
  MANO  BIOMS00  45 000000 00                B1-: 0.6 0.02  0.08  0.57     1.   0.
  44.80  5.36  5.36        4.         3.         8.     0.03     0.03     0.06
   0.000    0.000    0.001       0.002       0.000         0.000         0.000
Geothermal                       13
Landfill Gas                     14
  MANO  LFGAS00     000000 00                WASTE    0.25  0.00  0.00    38.   0.
  78.60 10.48 10.48      170.       130.       300.     2.32     1.77     4.09
   0.285    0.218    0.503       0.000       0.000         0.000         0.000
Wind                             15
  MANO  WIND 00     000000 00                NONE     0.00  0.00 71.00    52.   0.
  26.40  0.00  0.00       88.        49.       137.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                        16
Solar                            17
Non Fossil_Other                 18
  MANO  OTHER00     000000 00                NONE     0.00  0.00  0.00    21.   0.
 103.60  0.00  0.00       93.        73.       166.     1.02     0.80     1.82
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                     19
  MANO  WASTE041    000000 00                WASTE    0.42  0.00  0.00     2.   0.
 103.60  0.00  0.00        9.         7.        16.     0.10     0.08     0.17
   0.020    0.016    0.036       0.000       0.000         0.000         0.000
Pump Storage                     20
  MANO  PUMPS00     000000 00                NONE     0.00  0.00 71.00   350.   0.
   6.50  0.00  0.00        0.       142.       142.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                     21
Cgn_Coal                         22
Cgn_Gas                          23
  MANO  CGCT 0412   000000 00                GAS      0.10  0.00  0.00     8.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  MANO  CGCC 0412   000000 00                GAS      0.02  0.00  0.00     7.   0.
  13.90  0.00  1.03        0.         4.         4.     0.00     0.03     0.03
   0.000    0.000    0.000       0.000       0.000         0.001         0.000
  MANO  CGCC 0413   000000 00                GAS      0.10  0.00  0.00     1.   0.
  14.90  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  CGCC 0422   000000 00                GAS      0.02  0.00  0.00    40.   0.
  13.90  0.00  1.03        0.        21.        21.     0.00     0.15     0.15
   0.000    0.002    0.002       0.000       0.000         0.008         0.002
Cgn_Oil                          24
Cgn_Other                        25
NonCG IPP_Coal                   26
NonCG IPP_Gas                    27
NonCG IPP_Other                  28
Blr_Coal                         29
Blr_Gas                          30
Blr_Oil                          31
Blr_Other                        32
SteamOnly Cogen                  33
Rep.Coal-CC                      34
Rep.O/G-CC                       35
Rep.Coal-IGCC                    36
Ret.Scrubber                     37
Ret.ExistSCR & Scrub             38
Ret.ExistSNCR & Scrub            39
Ret.SCR                          40
```

```
  MANOILTSBBU0441181010110 01     SCR2     BE1: 6.1 0.62  2.20  3.89   301.   8.
  28.90  1.54  2.44      889.       133.      1022.     8.78     1.31    10.09
   2.734    0.041    2.775      11.100       0.020         0.940         0.256
  MANOILTSBBU0441181010110 01     SCR2     BB2: 4.1 0.62  1.00  2.62   301.   8.
  28.90  1.54  2.44       94.       697.       791.     0.93     6.88     7.81
   0.288    0.213    0.502       3.904       0.010         0.727         0.198
Ret.ExistScrub & SCR          41
  MANO  TSXBS0441191020103 01     SCR2     BG1: 8.0 0.63  0.84  2.73   366.   8.
  38.20  2.94  3.86      382.         0.       382.     3.83     0.00     3.83
   1.198    0.000    1.198       1.607       0.005         0.356         0.097
  MANO  TSXBS0441191020103 01     SCR2     BF1: 6.8 0.63  0.50  2.32   366.   8.
  38.20  2.94  3.86     1137.      1206.      2343.    11.39    12.09    23.48
   3.565    0.381    3.946       5.916       0.017         2.186         0.596
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-----------------------------------------------------------------------------
Year: 2005, Region: MAPP     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                       Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
```

```
/KWyr   VOM Mill/KWh    (GWh)                           (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  MAPP  TCOLS1111252020203 01              BE1: 6.1 0.46  0.52  3.53    76.   0.
  43.00  2.94  2.94      315.       251.       566.     3.28     2.61     5.89
   0.754    0.599    1.354       1.534       0.010         0.548         0.149
  MAPP  TSWLS0732312030103 02              LF2: 9.8 0.35  0.60  6.07    74.   0.
  43.00  2.94  2.94      257.       204.       462.     3.42     2.72     6.14
   0.596    0.473    1.069       1.843       0.019         0.600         0.164
  MAPP  TSEBS1142252020103 01              BE1: 6.1 0.32  0.67  2.07   217.   0.
  43.00  2.94  2.94      754.       460.      1214.     8.05     4.91    12.96
   1.304    0.795    2.099       4.319       0.013         1.207         0.329
  MAPP  TSISS1141262020703 01              SB1: 4.5 0.30  0.46  3.18   350.   0.
  42.70  2.94  2.94     1217.       966.      2183.    12.88    10.23    23.11
   1.932    1.534    3.466       5.280       0.037         2.229         0.608
  MAPP  TSXBS1142272020103 01              BE1: 6.1 0.30  0.13  2.07   161.   0.
  35.60  2.94  2.94        0.       110.       110.     0.00     1.18     1.18
   0.000    0.177    0.177       0.079       0.001         0.110         0.030
  MAPP  TSXBS1142272020103 01              BD1: 5.1 0.30  0.09  1.72   161.   0.
  35.60  2.94  2.94      560.       304.       864.     6.03     3.28     9.31
   0.904    0.492    1.396       0.426       0.008         0.867         0.236
  MAPPNDTSXLS0732312020304 02              LF2: 9.8 0.40  0.58  9.79    69.   0.
  35.60  2.94  2.94      286.       227.       514.     3.11     2.47     5.57
   0.621    0.494    1.115       1.617       0.027         0.545         0.149
  MAPPNDTSXLS0741311020103 02              LF2: 9.8 0.40  1.15  5.48   604.   0.
  35.60  2.94  2.94     2507.      1991.      4498.    26.07    20.71    46.77
   5.214    4.141    9.355      26.858       0.128         4.570         1.246
  MAPPNDTSXLS0742311010103 02              LF2: 9.8 0.86  0.52  5.68   420.   0.
  37.70  2.94  2.94     1743.      1384.      3127.    20.22    16.06    36.28
   8.694    6.905   15.600       9.521       0.103         3.545         0.967
  MAPPNDTSXLS0742312010304 02              LF2: 9.8 0.86  0.70  8.91   421.   0.
  35.60  2.94  2.94     1747.      1388.      3135.    19.86    15.78    35.64
   8.541    6.783   15.324      12.505       0.159         3.482         0.950
  MAPPNDTSXLS0742312020304 02              LF2: 9.8 0.32  0.28  9.79   900.   0.
  35.60  2.94  2.94     3735.      2967.      6702.    40.90    32.48    73.38
   6.502    5.164   11.667      10.427       0.359         7.169         1.955
  MAPP  TSYSS1141262020304 01              SD1: 4.4 0.33  0.20  3.30   871.   0.
  35.60  2.94  2.94     3615.      2871.      6486.    35.96    28.56    64.51
   5.951    4.726   10.677       6.593       0.106         6.224         1.698
  MAPP  TSYSS1142262020203 01              SE1: 5.5 0.29  0.16  4.42   535.   0.
  35.60  2.94  2.94     2220.       233.      2453.    24.03     2.52    26.55
   3.461    0.363    3.824       2.063       0.059         2.562         0.699
  MAPP  TSYSS1142262020203 01              SD1: 4.4 0.29  0.10  3.52   535.   0.
  35.60  2.94  2.94        0.      1408.      1408.     0.00    15.25    15.25
   0.000    2.195    2.195       0.790       0.027         1.471         0.401
  MAPP  TSYSS1142262020703 01              SD1: 4.4 0.24  0.11  3.08  1424.   0.
  37.70  2.94  2.94     5910.      4694.     10604.    62.99    50.03   113.02
   7.622    6.054   13.676       6.488       0.174        10.904         2.974
  MAPPWYTSZLS0841322020103 01              SE1: 5.5 0.35  0.05  4.65   550.   0.
  35.60  2.94  2.94     2283.      1813.      4095.    23.92    19.00    42.92
   4.187    3.325    7.512       1.037       0.100         4.141         1.129
  MAPP  TSASS0732312020703 01              SB1: 4.5 0.40  0.24  3.18    44.   0.
  43.00  2.94  2.94      183.       145.       328.     2.36     1.87     4.23
   0.472    0.375    0.847       0.512       0.007         0.408         0.111
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  MAPP  TCOLU0711312050710 01              SB1: 4.5 0.47  1.00  4.55    20.   0.
  20.80  1.54  1.54       83.        66.       149.     0.86     0.69     1.55
   0.203    0.161    0.364       0.774       0.004         0.149         0.041
  MAPP  TCOLU0731311040110 01              SB1: 4.5 0.60  1.00  4.41    28.   0.
  32.00  1.54  1.54      116.        92.       208.     1.21     0.96     2.17
```

0.363 0.288 0.651 1.084 0.005 0.209 0.057
MAPP TCOLU1111261040110 01 SB1: 4.5 0.60 1.00 4.41 14. 0.
17.40 1.54 1.54 58. 46. 104. 0.60 0.48 1.08
0.181 0.144 0.325 0.542 0.002 0.105 0.029
MAPP TCOLU1111271040210 01 BG1: 8.0 0.60 5.00 8.04 19. 0.
32.00 1.54 1.54 79. 63. 141. 0.82 0.65 1.47
0.246 0.195 0.441 3.678 0.006 0.137 0.037
MAPP TCOLU1111261040310 01 BB2: 4.1 0.60 0.72 0.45 8. 0.
32.00 1.54 1.54 33. 26. 60. 0.35 0.27 0.62
0.104 0.082 0.186 0.223 0.000 0.058 0.016
MAPP TCOLU1111252020110 01 BG1: 8.0 0.46 5.00 5.15 31. 0.
32.00 1.54 1.54 129. 102. 231. 1.34 1.06 2.40
0.308 0.244 0.552 6.002 0.006 0.224 0.061
MAPP TCOLU1111262050710 01 BB2: 4.1 0.40 1.00 4.10 103. 0.
32.00 1.54 1.54 427. 340. 767. 4.45 3.53 7.98
0.891 0.708 1.599 3.988 0.016 0.743 0.203
MAPP TCOLU1131261040110 01 SB1: 4.5 0.60 1.00 4.41 37. 0.
17.40 1.54 1.54 129. 102. 231. 1.34 1.06 2.40
0.401 0.319 0.720 1.200 0.005 0.232 0.063
MAPP TCOLU1131262020110 01 BB2: 4.1 0.46 1.00 2.62 47. 0.
32.00 1.54 1.54 163. 130. 293. 1.70 1.35 3.05
0.391 0.310 0.701 1.524 0.004 0.284 0.077
MAPP TCOLU1131272020110 01 SB2: 6.5 0.46 1.00 6.29 62. 0.
32.00 1.54 1.54 216. 131. 347. 2.24 1.37 3.61
0.516 0.314 0.830 1.804 0.011 0.348 0.095
MAPP TCOLU1131252020210 01 SB2: 6.5 0.46 1.00 6.09 73. 0.
32.00 1.54 1.54 254. 155. 408. 2.64 1.61 4.25
0.607 0.370 0.977 2.124 0.013 0.410 0.112
MAPP TCOLU1131262020310 01 SB1: 4.5 0.46 1.00 1.23 150. 0.
32.00 1.54 1.54 521. 414. 936. 5.42 4.31 9.73
1.247 0.991 2.238 4.865 0.006 0.939 0.256
MAPPWITCOLU1311161010710 01 SB2: 6.5 0.86 1.00 6.48 24. 0.
32.00 1.54 1.54 100. 79. 179. 1.04 0.82 1.86
0.445 0.354 0.799 0.929 0.006 0.179 0.049
MAPPWITCOLU1311162020110 01 SD2: 6.7 0.46 1.40 6.50 63. 0.
32.00 1.54 1.54 261. 208. 469. 2.72 2.16 4.88
0.625 0.497 1.122 3.415 0.016 0.471 0.128
MAPPWITCOLU1311162040210 01 SB2: 6.5 0.37 1.00 6.48 49. 0.
32.00 1.54 1.54 203. 162. 365. 2.11 1.68 3.79
0.393 0.312 0.706 1.897 0.012 0.366 0.100
MAPP TOLBU1141252020110 01 SB2: 6.5 0.34 1.00 6.29 130. 0.
32.00 1.54 1.54 452. 275. 727. 4.74 2.89 7.64
0.809 0.493 1.302 3.818 0.024 0.737 0.201
MAPPMOTOLBU0512282020110 01 SD2: 6.7 0.42 1.40 6.50 21. 0.
32.00 1.54 1.54 87. 69. 156. 0.96 0.76 1.72
0.203 0.161 0.364 1.206 0.006 0.166 0.045
MAPPMOTOLBU0532281010110 01 SB2: 6.5 0.54 1.00 6.29 97. 0.
32.00 1.54 1.54 403. 206. 608. 4.48 2.29 6.77
1.222 0.624 1.846 3.387 0.021 0.654 0.178
MAPP TSABU1141282020110 01 BB1: 3.4 0.40 1.00 2.18 924. 0.
18.70 1.54 1.54 0. 786. 786. 0.00 8.04 8.04
0.000 1.623 1.623 4.019 0.009 0.748 0.204
MAPP TSABU1141282020110 01 BB2: 4.1 0.40 1.00 2.62 924. 0.
18.70 1.54 1.54 3835. 2260. 6095. 39.22 23.11 62.33
7.922 4.668 12.590 31.164 0.082 5.804 1.583
MAPP TSABU1141282010210 01 BB2: 4.1 0.44 1.00 3.69 135. 0.
32.00 1.54 1.54 560. 373. 933. 5.90 3.93 9.83
1.310 0.872 2.182 4.914 0.018 0.915 0.250
MAPP TSABU1142282020110 01 BB1: 3.4 0.32 1.00 2.18 371. 0.
26.40 1.54 1.54 1540. 429. 1969. 16.41 4.57 20.98
2.609 0.727 3.335 10.488 0.023 1.953 0.533
MAPP TSABU1142282020110 01 BB2: 4.1 0.32 1.00 2.62 371. 0.
26.40 1.54 1.54 0. 596. 596. 0.00 6.35 6.35
0.000 1.009 1.009 3.173 0.008 0.591 0.161
MAPPWITSASU1331162020110 01 SB2: 6.5 0.41 1.00 6.29 87. 0.

32.00 1.54 1.54 361. 287. 648. 3.74 2.97 6.71
0.773 0.614 1.386 3.356 0.021 0.648 0.177
MAPPWITSASU1332162020110 01 SB2: 6.5 0.41 1.00 6.29 57. 0.
32.00 1.54 1.54 237. 188. 424. 2.59 2.06 4.65
0.535 0.425 0.961 2.326 0.015 0.449 0.122
MAPP TSBBU1112271020710 01 BG1: 8.0 0.95 5.00 8.04 23. 0.
32.00 1.54 1.54 95. 76. 171. 1.15 0.92 2.07
0.546 0.434 0.980 5.181 0.008 0.193 0.053
MAPP TSBBU1112272040210 01 SD2: 6.7 0.47 1.40 6.70 36. 0.
32.00 1.54 1.54 125. 76. 201. 1.63 0.99 2.62
0.382 0.233 0.615 1.833 0.009 0.253 0.069
MAPP TSBBU1131262020110 01 SB1: 4.5 0.42 1.00 4.41 29. 0.
26.40 1.54 1.54 120. 80. 200. 1.20 0.80 2.00
0.250 0.167 0.417 0.998 0.004 0.192 0.052
MAPP TSBBU1131262020210 01 SB1: 4.5 0.41 1.00 4.28 60. 0.
26.40 1.54 1.54 209. 166. 374. 2.19 1.74 3.93
0.446 0.354 0.800 1.965 0.008 0.379 0.103
MAPPNETSBBU1432282020210 01 BB1: 3.4 0.22 0.75 3.07 85. 0.
21.40 1.54 1.54 0. 98. 98. 0.00 1.10 1.10
0.000 0.122 0.122 0.412 0.002 0.103 0.028
MAPPNETSBBU1432282020210 01 BB2: 4.1 0.22 0.75 3.69 85. 0.
21.40 1.54 1.54 353. 136. 489. 3.96 1.53 5.49
0.438 0.169 0.607 2.054 0.010 0.511 0.139
MAPPNETSBBU1441282010310 01 BB2: 4.1 0.85 0.67 0.45 120. 0.
32.00 1.54 1.54 498. 396. 894. 5.20 4.13 9.33
2.205 1.751 3.955 3.102 0.002 0.869 0.237
MAPPNETSBBU1442282010310 01 BB1: 3.4 0.88 0.67 0.38 105. 0.
26.40 1.54 1.54 0. 121. 121. 0.00 1.36 1.36
0.000 0.600 0.600 0.456 0.000 0.127 0.035
MAPPNETSBBU1442282010310 01 BB2: 4.1 0.88 0.67 0.45 105. 0.
26.40 1.54 1.54 436. 169. 604. 4.90 1.89 6.79
2.153 0.833 2.986 2.273 0.002 0.633 0.173
MAPPNETSBSU1432282020110 01 SB2: 6.5 0.40 1.00 6.29 76. 0.
32.00 1.54 1.54 264. 210. 474. 3.10 2.46 5.56
0.620 0.493 1.113 2.782 0.017 0.537 0.146
MAPPNETSBSU1432282020210 01 SB2: 6.5 0.38 0.70 6.09 172. 0.
17.40 1.54 1.54 714. 567. 1281. 7.94 6.31 14.25
1.509 1.198 2.707 4.952 0.043 1.375 0.375
MAPPNETSBSU1441282020110 01 SB2: 6.5 0.46 1.00 6.29 585. 0.
17.40 1.54 1.54 2428. 1928. 4356. 25.11 19.95 45.06
5.776 4.588 10.364 22.530 0.142 4.347 1.186
MAPPNETSBSU1441282020210 01 SB2: 6.5 0.46 0.65 6.09 700. 0.
17.40 1.54 1.54 2905. 2307. 5212. 27.57 21.90 49.47
6.341 5.036 11.377 16.151 0.151 4.772 1.302
MAPPNETSBSU1442282020110 01 SB2: 6.5 0.42 1.00 6.29 569. 0.
29.90 1.54 1.54 2361. 1876. 4237. 26.05 20.69 46.75
5.510 4.376 9.887 23.373 0.147 4.510 1.230
MAPPNETSBSU1442282020510 01 SB2: 6.5 0.46 0.66 1.75 665. 0.
17.40 1.54 1.54 2760. 2192. 4952. 29.81 23.68 53.48
6.856 5.445 12.301 17.543 0.047 5.160 1.407
MAPP TSCBU1131272010110 01 SB2: 6.5 0.39 1.00 6.29 80. 0.
32.00 1.54 1.54 278. 221. 499. 2.79 2.21 5.00
0.539 0.428 0.967 2.500 0.016 0.482 0.132
MAPP TSCBU1131252020110 01 SB2: 6.5 0.44 1.00 6.29 34. 0.
32.00 1.54 1.54 118. 72. 190. 1.23 0.75 1.98
0.272 0.166 0.438 0.989 0.006 0.191 0.052
MAPP TSCSU1141251020210 01 SB2: 6.5 0.55 0.73 6.09 714. 0.
17.40 1.54 1.54 2482. 1971. 4454. 25.92 20.59 46.51
7.077 5.621 12.698 16.954 0.142 4.488 1.224
MAPP TSCSU1141252020110 01 SB2: 6.5 0.37 0.68 6.29 637. 0.
17.40 1.54 1.54 2277. 1759. 4036. 23.91 18.47 42.37
4.375 3.380 7.755 14.365 0.133 4.088 1.115
MAPP TSCSU1141252020210 01 SB2: 6.5 0.30 0.72 6.09 644. 0.
17.40 1.54 1.54 2239. 1778. 4017. 23.39 18.58 41.96
3.450 2.740 6.190 15.149 0.128 4.049 1.104

```
  MAPP  TSCSU1142252020210 01                SB2: 6.5 0.30  0.71  6.09   260.   0.
  21.40  1.54  1.54      904.       551.      1455.    10.51     6.41    16.92
   1.577    0.961    2.537       6.039       0.052         1.632         0.445
  MAPPWITSCSU1342162020210 01                SB2: 6.5 0.31  0.66  6.09   377.   0.
  17.40  1.54  1.54     1565.      1243.      2807.    17.36    13.79    31.15
   2.647    2.103    4.750      10.200       0.095         3.005         0.820
  MAPP  TSDSU1132252020110 01                SB2: 6.5 0.35  0.43  6.29    30.   0.
  26.40  1.54  1.54      104.        64.       168.     1.22     0.74     1.96
   0.213    0.130    0.343       0.423       0.006         0.189         0.051
  MAPP  TSDSU1132252020210 01                SB2: 6.5 0.33  0.66  6.09    88.   0.
  32.00  1.54  1.54      306.       186.       492.     3.40     2.07     5.47
   0.569    0.347    0.915       1.809       0.017         0.527         0.144
  MAPP  TSEBU1141252020110 01                SB2: 6.5 0.30  1.00  6.29   211.   0.
  26.40  1.54  1.54      734.       447.      1181.     7.60     4.63    12.24
   1.133    0.690    1.823       6.118       0.038         1.181         0.322
  MAPPNDTSELU0742312010110 02                LF2: 9.8 0.86  2.90  9.10   690.   0.
  26.40  0.00  1.54        0.      1019.      1019.     0.00    11.45    11.45
   0.000    4.923    4.923      16.601       0.052         1.119         0.305
  MAPPNDTSELU0742312020110 02                LF2: 9.8 0.36  2.90  9.79   378.   0.
  32.00  1.54  1.54      286.       558.       844.     3.11     6.08     9.19
   0.555    1.085    1.640      13.324       0.045         0.898         0.245
  MAPP  TSESU1141261010110 01                SB1: 4.5 0.68  1.00  4.41   567.   0.
  26.40  1.54  1.54     2353.      1869.      4222.    22.92    18.20    41.12
   7.815    6.207   14.021      20.559       0.091         3.967         1.082
  MAPP  TSGBU1132271010110 01                SB2: 6.5 0.53  1.00  6.29    76.   0.
  26.40  1.54  1.54      264.       161.       425.     2.87     1.75     4.62
   0.753    0.459    1.213       2.310       0.015         0.446         0.122
  MAPP  TSGBU1132272020110 01                SB2: 6.5 0.45  1.00  6.29    39.   0.
  32.00  1.54  1.54      136.        83.       218.     1.52     0.92     2.44
   0.341    0.208    0.549       1.220       0.008         0.235         0.064
  MAPP  TSGBU1132272020210 01                SB2: 6.5 0.43  1.00  6.09    78.   0.
  29.40  1.54  1.54      271.       165.       436.     3.05     1.86     4.90
   0.652    0.397    1.049       2.451       0.015         0.473         0.129
  MAPP  TSGBU1141272020210 01                SB2: 6.5 0.32  1.00  6.09   142.   0.
  32.00  1.54  1.54      494.       301.       795.     5.03     3.07     8.10
   0.811    0.494    1.304       4.051       0.025         0.782         0.213
  MAPP  TSISU1132262020110 01                SB1: 4.5 0.34  0.53  4.41   242.   0.
  32.00  1.54  1.54      841.       513.      1354.     9.79     5.96    15.75
   1.664    1.014    2.678       4.150       0.035         1.520         0.414
  MAPP  TSISU1132262020310 01                SB1: 4.5 0.30  1.00  1.23   138.   0.
  32.00  1.54  1.54      480.       292.       772.     5.31     3.24     8.55
   0.796    0.485    1.282       4.273       0.005         0.824         0.225
  MAPP  TSISU1142262020110 01                SB1: 4.5 0.38  0.58  4.41   454.   0.
  32.00  1.54  1.54     1884.      1254.      3138.    20.80    13.84    34.64
   3.984    2.650    6.634       9.995       0.076         3.342         0.912
  MAPPWITSISU1341392020110 01                SB1: 4.5 0.31  1.00  4.41   377.   0.
  26.40  1.54  1.54     1565.      1041.      2606.    14.21     9.45    23.66
   2.209    1.470    3.679      11.829       0.052         2.283         0.623
  MAPP  TSKSU1141261010110 01                SB1: 4.5 0.55  1.00  4.41   222.   0.
  32.00  1.54  1.54      772.       613.      1385.     7.95     6.31    14.26
   2.186    1.736    3.922       7.131       0.031         1.376         0.375
  MAPP  TSLBU1112261020710 01                SD1: 4.4 0.81  1.40  4.40    23.   0.
  32.00  1.54  1.54       95.        76.       171.     1.12     0.89     2.00
   0.454    0.361    0.815       1.403       0.004         0.193         0.053
  MAPPNETSLBU1412281020310 01                BB1: 3.4 0.71  0.62  0.38    35.   0.
  32.00  1.54  1.54        0.        40.        40.     0.00     0.53     0.53
   0.000    0.188    0.188       0.165       0.000         0.050         0.014
  MAPPNETSLBU1412281020310 01                BB2: 4.1 0.71  0.62  0.45    35.   0.
  32.00  1.54  1.54      145.        56.       201.     1.92     0.74     2.66
   0.676    0.261    0.937       0.820       0.001         0.248         0.068
Oil/Gas Steam                    5
Oil/Gas Steam_Nox                6
Nuclear                          7
  MAPP  NUKE 00    7000000 00                NUC      0.00  0.00  0.00   561.   0.
 176.10  0.82  0.82     2777.      1704.      4481.    30.24    18.55    48.79
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   529.   0.
  95.60  0.59  0.59     2691.      1573.      4265.    28.99    16.95    45.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   597.   0.
 109.60  0.70  0.70     1984.      2190.      4174.    20.73    22.89    43.62
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   530.   0.
 145.60  0.59  0.59     2534.      1592.      4126.    27.23    17.11    44.34
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   476.   0.
 232.50  1.20  1.20     1958.      1746.      3704.    20.84    18.58    39.43
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   758.   0.
 185.20  0.93  0.93     2392.      2586.      4978.    25.65    27.73    53.39
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  MAPP  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  3204.   0.
  15.40  0.00  0.00     5412.      4577.      9989.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  MAPP  CC   0422   000000 00              GAS      0.02  0.00  0.00   537.   0.
  13.90  1.03  1.03      120.       277.       397.     0.90     2.07     2.97
   0.009    0.021    0.030       0.000       0.000         0.158         0.043
  MAPP  CC   1122   000000 00              GAS      0.05  0.00  0.00   451.   0.
  13.90  1.03  1.03       60.       232.       292.     0.47     1.82     2.29
   0.012    0.047    0.059       0.000       0.000         0.122         0.033
  MAPPNECC   1422   000000 00              GAS      0.02  0.00  0.00   118.   0.
  13.90  1.03  1.03       26.        61.        87.     0.20     0.46     0.65
   0.002    0.005    0.007       0.000       0.000         0.035         0.009
IGCC                            10
Turbine                         11
  MAPP  CT   0712   000000 00              GAS      0.08  0.00  0.00     2.   0.
   2.80  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  CT   1111   000000 00              GAS      0.11  0.00  0.00    64.   0.
   5.70  0.00  1.03        0.        11.        11.     0.00     0.10     0.10
   0.000    0.006    0.006       0.000       0.000         0.005         0.001
  MAPP  CT   1112   000000 00              GAS      0.09  0.00  0.00   273.   0.
   3.80  0.00  1.03        0.        47.        47.     0.00     0.50     0.50
   0.000    0.023    0.023       0.000       0.000         0.027         0.007
  MAPP  CT   1122   000000 00              GAS      0.08  0.00  0.00  1513.   0.
   2.80  0.00  1.03        0.       135.       135.     0.00     1.48     1.48
   0.000    0.060    0.060       0.000       0.000         0.078         0.021
  MAPPNECT   1412   000000 00              GAS      0.10  0.00  0.00    49.   0.
   5.00  0.00  1.03        0.         8.         8.     0.00     0.09     0.09
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  MAPPWICT   1312   000000 00              GAS      0.08  0.00  0.00    25.   0.
   3.60  0.00  1.03        0.         4.         4.     0.00     0.05     0.05
   0.000    0.002    0.002       0.000       0.000         0.002         0.001
  MAPPWICT   1322   000000 00              GAS      0.08  0.00  0.00    82.   0.
   2.80  0.00  1.03        0.        14.        14.     0.00     0.15     0.15
   0.000    0.006    0.006       0.000       0.000         0.008         0.002
Biomass                         12
  MAPP  BIOMS00  46 000000 00              B1-: 0.6 0.02  0.08  0.57   163.   0.
  44.80  5.36  5.36      644.       409.      1054.     5.22     3.31     8.53
   0.052    0.033    0.085       0.341       0.002         0.000         0.000
Geothermal                      13
Landfill Gas                    14
  MAPP  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    11.   0.
  78.60 10.48 10.48       49.        38.        87.     0.67     0.51     1.18
   0.083    0.063    0.146       0.000       0.000         0.000         0.000
Wind                            15
  MAPP  WIND 00     000000 00              NONE     0.00  0.00 71.00   857.   0.
  26.40  0.00  0.00     1443.       809.      2252.     0.00     0.00     0.00
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  MAPP  OTHER00     000000 00              NONE     0.00  0.00 71.00    34.   0.
 103.60  0.00  0.00      150.       118.       268.     1.65     1.30     2.95
   0.000    0.000    0.000       0.000       0.105         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
  MAPP  MNIMP00     000000 00              NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00        1.         1.         2.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                       22
  MAPP  CGCOU1111262050210 01            BB2: 4.1 0.40  1.00  4.10    11.   0.
  32.00  1.54  1.54       45.        36.        80.     0.40     0.32     0.73
   0.081    0.065    0.146       0.363       0.001         0.068         0.018
  MAPP  CGCOU1111262050710 01            BB2: 4.1 0.40  1.00  4.10     1.   0.
  32.00  1.54  1.54        4.         3.         7.     0.04     0.03     0.07
   0.008    0.007    0.015       0.037       0.000         0.007         0.002
  MAPP  CGSDU1131251020210 01            BB2: 4.1 0.53  0.42  3.69    65.   0.
  17.40  1.54  1.54      263.       212.       475.     2.34     1.89     4.23
   0.617    0.498    1.115       0.882       0.008         0.394         0.107
Cgn_Gas                        23
  MAPP  CGCT 1112   000000 00              GAS      0.09  0.00  0.00    31.   0.
   2.80  0.00  1.03        0.         5.         5.     0.00     0.06     0.06
   0.000    0.002    0.002       0.000       0.000         0.003         0.001
Cgn_Oil                        24
Cgn_Other                      25
  MAPP  CGOTH00     000000 00              NONE     0.00  0.00 71.00     2.   0.
 103.60  0.00  0.00        9.         7.        15.     0.04     0.03     0.06
   0.000    0.000    0.000       0.000       0.002         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
```

```
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Year: 2005, Region: UPNY     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  UPNY  TSYBA0141022020105 01              BF2:11.1 0.42  0.34  3.77   675.   0.
  36.20  2.91  3.91     2801.      2225.      5026.    25.74    20.44    46.18
   5.457    0.429    5.886       7.966       0.060         4.301         1.173
  UPNY  TSXBA0141022020105 01              BF2:11.1 0.42  0.12  3.77   157.   0.
  43.50  2.91  3.91      652.       517.      1169.     6.23     4.95    11.17
   1.308    0.104    1.411       0.670       0.014         1.040         0.284
Scrubbed Coal                  2
  UPNY  TSXBS0141022020103 01              BF2:11.1 0.42  0.12  3.77   149.   0.
  43.00  2.94  2.94      618.       491.      1109.     5.85     4.64    10.49
   1.228    0.975    2.203       0.629       0.020         0.977         0.266
Unscrubbed Coal_NOx            3
  UPNY  TCOLN0131022020102 01              BE3:18.4 0.40  2.20 11.79    47.   0.
  32.20  1.45  2.45      195.        59.       254.     2.03     0.62     2.65
   0.406    0.080    0.486       2.910       0.016         0.246         0.067
  UPNY  TSFBO0141022020102 01              BE3:18.4 0.32  2.20 11.79   105.   0.
  32.30  0.54  1.54      436.       346.       782.     4.18     3.32     7.50
   0.667    0.344    1.010       8.248       0.044         0.698         0.190
  UPNY  TSFBN0131022020102 01              BE3:18.4 0.38  2.20 11.79   210.   0.
  32.20  1.45  2.45      872.       692.      1564.     8.71     6.92    15.63
   1.646    0.851    2.497      17.191       0.092         1.455         0.397
Unscrubbed Coal                4
  UPNY  TCOLU0111022050110 01              BD2:12.5 0.35  1.50  8.03   117.   0.
  32.00  1.54  1.54      486.       386.       871.     5.05     4.01     9.06
   0.884    0.702    1.586       6.795       0.036         0.844         0.230
```

```
  UPNY  TCOLU0111022020210 01              BF2:11.1 0.46  3.00  9.98    44.   0.
  32.00  1.54  1.54      183.       145.       328.     1.90     1.51     3.41
   0.437    0.347    0.784       5.111       0.017         0.317         0.087
  UPNY  TCOLU0111022050210 01              BD2:12.5 0.35  1.50 12.54    82.   0.
  32.00  1.54  1.54      340.       270.       611.     3.54     2.81     6.35
   0.619    0.492    1.111       4.763       0.040         0.591         0.161
  UPNY  TCOLU0131022020110 01              BE3:18.4 0.46  2.20 11.79    55.   0.
  32.00  1.54  0.00      228.         0.       228.     2.37     0.00     2.37
   0.546    0.000    0.546       2.611       0.014         0.221         0.060
  UPNY  TSCBU0131022020110 01              BE3:18.4 0.45  2.20 11.79   362.   0.
  32.00  1.54  0.00     1502.         0.      1502.    15.62     0.00    15.62
   3.547    0.000    3.547      17.187       0.092         1.455         0.397
  UPNY  TSCBU0141022020210 01              BE3:18.4 0.30  2.20 16.58   387.   0.
  32.00  1.54  1.54     1606.      1276.      2882.    16.70    13.27    29.97
   2.480    1.970    4.451      32.967       0.248         2.791         0.761
  UPNY  TSFBU0131022020210 01              BE3:18.4 0.35  2.20 16.58   266.   0.
  32.00  1.54  1.54     1104.       877.      1981.    11.24     8.93    20.17
   1.990    1.581    3.571      22.191       0.167         1.879         0.512
  UPNY  TSGBU0141022020210 01              BE3:18.4 0.33  2.20 16.58   412.   0.
  32.00  1.54  1.54     1710.       885.      2595.    17.78     9.21    26.99
   2.961    1.533    4.493      29.686       0.224         2.513         0.685
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  UPNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   498.   0.
 192.50  0.74  0.74     2358.      1686.      4044.    24.73    17.69    42.42
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  UPNY  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   619.   0.
 206.50  1.07  1.07     2260.      2271.      4531.    24.28    24.39    48.66
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  UPNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1154.   0.
 117.70  0.78  0.78     4562.      4093.      8655.    48.99    43.96    92.95
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  UPNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   840.   0.
 192.60  0.77  0.77     3489.      3081.      6571.    34.77    30.70    65.47
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  UPNY  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  5551.   0.
  15.50  0.00  0.00    15534.     10355.     25889.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
IGCC                           10
Turbine                        11
Biomass                        12
  UPNY  BIOMS00  47 000000 00              B1-: 0.6 0.02  0.08  0.57    18.   0.
  44.80  5.36  5.36        78.        60.       138.     0.72     0.56     1.28
   0.007    0.006    0.013       0.051       0.000         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  UPNY  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     6.   0.
  78.60 10.48 10.48        27.        20.        47.     0.37     0.28     0.65
   0.045    0.034    0.079       0.000       0.000         0.000         0.000
Wind                           15
  UPNY  WIND 00     000000 00              NONE     0.00  0.00 71.00   194.   0.
  26.40  0.00  0.00        87.        49.       136.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
  UPNY  FCELL00     000000 00              GAS      0.40  0.00  0.00     1.   0.
  15.00  0.00  2.06         0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Solar                          17
Non Fossil_Other               18
  UPNY  OTHER00     000000 00              NONE     0.00  0.00 71.00    34.   0.
 103.60  0.00  0.00       150.       118.       268.     1.65     1.30     2.95
   0.000    0.000    0.000       0.000       0.105         0.000         0.000
```

```
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
  UPNY  NYIMP00     000000 00              NONE     0.00  0.00 71.00  3000.   0.
   0.00  0.00  0.00     8258.      5960.     14217.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                        22
  UPNY  CGCOU0131022050710 01            BA2: 5.2 0.35  1.10  5.17    80.   0.
  11.70  1.54  1.54      324.       261.       585.     2.47     2.00     4.47
   0.433    0.350    0.783       2.460       0.012         0.416         0.114
  UPNY  CGCOS0131022050304 01            BF2:11.1 0.35  0.15  4.44    44.   0.
  23.10  2.94  2.94      178.       144.       322.     1.74     1.41     3.15
   0.305    0.246    0.551       0.236       0.007         0.293         0.080
  UPNY  CGCOD0131022050307 01            BF2:11.1 0.35  0.29  0.33    50.   0.
  23.30  2.84  3.84      202.       163.       366.     1.62     1.31     2.93
   0.284    0.149    0.433       0.427       0.000         0.273         0.074
Cgn_Gas                         23
  UPNY  CGCC 0112   000000 00              GAS      0.16  0.00  0.00   139.   0.
  13.90  0.00  1.03        0.        24.        24.     0.00     0.20     0.20
   0.000    0.016    0.016       0.000       0.000         0.011         0.003
  UPNY  CGCC 0122   000000 00              GAS      0.18  0.00  0.00  1566.   0.
  13.90  0.00  1.03        0.        40.        40.     0.00     0.32     0.32
   0.000    0.029    0.029       0.000       0.000         0.017         0.005
Cgn_Oil                         24
Cgn_Other                       25
  UPNY  CGOTH00     000000 00              NONE     0.00  0.00 71.00    44.   0.
 103.60  0.00  0.00      191.       147.       338.     2.55     1.97     4.52
   0.000    0.000    0.000       0.000       0.160         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
Ret.ExistScrub & SCR            41
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
Ret.ExistScrub+GasR             47
Ret.GasReburn+Scrub             48
Ret.ACI                         49
Ret.ExistScrub&ACI              50
Ret.ExistSCR&ACI                51
Ret.ExistSNCR&ACI               52
Ret.ACI & SCR                   53
Ret.ExistScrub&ACI&SCR          54
Ret.ACI & SNCR                  55
Ret.ExistScrub&ACI&SNCR         56
Ret.ACI & Srub                  57
Ret.ExistSCR&ACI&Scrub          58
Ret.ExistSNCR&ACI&Scrub         59
Ret.ExistSNCR&ExistScrub&ACI    60
Ret.ExistSCR&ExistScrub&ACI     61
Ret.ExistNOx&ExistScrub&ACI     62
```

```
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2005, Region: DSNY     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  DSNYNYTSABU0141012020110 01              BA2: 5.2 0.38  1.10  3.31   541.   0.
  20.60  1.54  1.54     2245.      1374.      3619.    22.87    13.99    36.86
   4.287    2.623    6.911      20.271       0.061         3.432         0.936
  DSNYNYTSABU0142012020110 01              BA2: 5.2 0.37  0.80  3.31   197.   0.
  26.40  1.54  1.54      818.       417.      1235.     8.87     4.53    13.39
   1.636    0.835    2.471       5.363       0.022         1.247         0.340
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  DSNY  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   984.   0.
 145.30  1.03  1.03     4611.      3610.      8221.    47.62    37.28    84.90
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  DSNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   953.   0.
 237.60  1.25  1.25     2807.      3450.      6258.    28.40    34.91    63.31
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  DSNY  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   442.   0.
  14.60  0.00  0.00     1237.       824.      2061.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  DSNY  CC   0122   000000 00              GAS      0.02  0.00  0.00  1830.   0.
  13.90  1.03  1.03     7839.      5900.     13739.    58.79    44.25   103.04
   0.588    0.442    1.030       0.000       0.000         5.468         1.491
  DSNY  CC   0123   000000 00              GAS      0.19  0.00  0.00   101.   0.
  13.90  1.03  0.00       23.         0.        23.     0.25     0.00     0.25
```

```
   0.023    0.000    0.023       0.000       0.000         0.013         0.004
IGCC                           10
Turbine                        11
Biomass                        12
Geothermal                     13
Landfill Gas                   14
Wind                           15
  DSNY  WIND 00     000000 00              NONE     0.00  0.00 71.00    64.   0.
  26.40  0.00  0.00       29.        16.        45.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  DSNY  OTHER00     000000 00              NONE     0.00  0.00 71.00    82.   0.
 103.60  0.00  0.00      361.       285.       646.     3.98     3.14     7.11
   0.000    0.000    0.000       0.000       0.252         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
  DSNY  PUMPS00     000000 00              NONE     0.00  0.00 71.00  1040.   0.
   6.50  0.00  0.00        0.       149.       149.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
  DSNY  CGCC 0113   000000 00              GAS      0.19  0.00  0.00    35.   0.
  13.90  1.03  1.03        8.        18.        26.     0.07     0.17     0.24
   0.007    0.016    0.023       0.000       0.000         0.013         0.003
  DSNY  CGCC 0123   000000 00              GAS      0.19  0.00  0.00   487.   0.
  13.90  1.03  1.03      109.       108.       217.     1.03     1.02     2.05
   0.096    0.095    0.191       0.000       0.000         0.109         0.030
Cgn_Oil                        24
Cgn_Other                      25
  DSNY  CGOTH00     000000 00              NONE     0.00  0.00 71.00     7.   0.
 103.60  0.00  0.00       30.        23.        54.     0.13     0.10     0.23
   0.000    0.000    0.000       0.000       0.008         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
```

```
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------
Year: 2005, Region: NYC      (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
Oil/Gas Steam                  5
  NYC   STLSU0121   000000 00              GAS      0.14  0.00  0.00  4747.   0.
  20.90  2.57  2.57     5621.      6174.     11796.    53.63    58.90   112.53
   3.674    4.035    7.708       0.000       0.000         5.972         1.629
Oil/Gas Steam_Nox              6
Nuclear                        7
Hydro                          8
Comb.Cycle Gas                 9
  NYC   CC   0122   000000 00              GAS      0.10  0.00  0.00   490.   0.
  13.90  1.03  1.03     1647.      1263.      2910.    13.19    10.11    23.30
   0.686    0.526    1.212       0.000       0.000         1.237         0.337
  NYC   CC   0123   000000 00              GAS      0.19  0.00  0.00    78.   0.
  13.90  1.03  1.03       17.        13.        31.     0.19     0.15     0.34
   0.018    0.014    0.032       0.000       0.000         0.018         0.005
IGCC                          10
Turbine                       11
  NYC   CT   0122   000000 00              GAS      0.08  0.00  0.00   460.   0.
   2.80  1.03  1.03      106.        79.       186.     1.16     0.87     2.03
```

```
   0.046    0.035    0.081       0.000       0.000         0.108         0.029
Biomass                        12
Geothermal                     13
Landfill Gas                   14
Wind                           15
  NYC   WIND 00     000000 00              NONE     0.00  0.00 71.00    59.   0.
  26.40  0.00  0.00        27.        15.        41.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
  NYC   CGCT 0112   000000 00              GAS      0.13  0.00  0.00     2.   0.
   2.80  1.03  1.03         7.         5.        12.     0.07     0.05     0.12
   0.004    0.003    0.008       0.000       0.000         0.006         0.002
  NYC   CGCC 0112   000000 00              GAS      0.19  0.00  0.00    15.   0.
  13.90  1.03  1.03        50.        39.        89.     0.44     0.34     0.78
   0.041    0.032    0.073       0.000       0.000         0.042         0.011
  NYC   CGCC 0113   000000 00              GAS      0.19  0.00  0.00    46.   0.
  14.10  1.03  1.03       155.       119.       273.     1.41     1.08     2.50
   0.132    0.101    0.233       0.000       0.000         0.133         0.036
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
```

```
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2005, Region: LILC     (Emissions By Plant)
--------------------------------------------------
```

	NOx			SO2		MER	CO2		Carbon		
	Emission		Generation	Emission		Emission	Emission (lb/MBtu)	Emission (lb/TBtu)	Trillion (MW)	$ /KWyr	VOM Mill/KWh
	(1000 Tons)		(GWh)	(1000 Tons)		(Tons)	(Mil Tonnes)	(Mil Tonnes)	(Btu)		
Unit						Fuel	NOx	SO2	MERCURY	Cap.	Cap.
	FO&M WINT.	SUMM.	WINTER	SUMMER		Total	WINTER	SUMMER	Total		
WINTER	SUMMER	Total		Total		Total	Total		Total		
Scrubbed Coal_NOx				1							
Scrubbed Coal				2							
Unscrubbed Coal_NOx				3							
Unscrubbed Coal				4							
Oil/Gas Steam				5							
LILC STHSU0121	000000 00					GAS	0.15	0.00	0.00	1531.	0.
20.60	0.00	2.57	0.	271.		271.	0.00	2.86	2.86		
0.000	0.216	0.216		0.000		0.000	0.152		0.041		
LILC STLSU0121	000000 00					GAS	0.09	0.00	0.00	987.	0.
20.70	2.57	2.57	1015.	2090.		3105.	10.68	21.99	32.67		
0.486	1.001	1.486		0.000		0.000	1.734		0.473		
Oil/Gas Steam_Nox				6							
Nuclear				7							
Hydro				8							
Comb.Cycle Gas				9							
LILC CC 0113	000000 00					GAS	0.19	0.00	0.00	22.	0.
14.90	1.03	1.03	15.	57.		72.	0.16	0.63	0.79		
0.015	0.059	0.074		0.000		0.000	0.042		0.011		
LILC CC 0122	000000 00					GAS	0.06	0.00	0.00	136.	0.
13.90	1.03	1.03	457.	351.		808.	3.60	2.76	6.36		
0.106	0.081	0.188		0.000		0.000	0.337		0.092		
IGCC				10							
Turbine				11							
LILC CT 0112	000000 00					GAS	0.10	0.00	0.00	9.	0.
11.20	1.03	1.03	31.	23.		55.	0.31	0.23	0.55		
0.016	0.012	0.028		0.000		0.000	0.029		0.008		
LILC CT 0114	000000 00					GAS	0.13	0.00	0.00	332.	0.
11.10	0.00	1.03	0.	12.		12.	0.00	0.17	0.17		
0.000	0.010	0.010		0.000		0.000	0.009		0.002		
LILC CT 0122	000000 00					GAS	0.08	0.00	0.00	405.	0.

```
   2.80  1.03  1.03     1406.      1050.      2456.    15.37    11.47    26.84
   0.615    0.459    1.074       0.000       0.000         1.425         0.389
  LILC  CT   0123   000000 00              GAS      0.12  0.00  0.00   902.   0.
   5.30  1.03  1.03      101.       155.       256.     1.33     2.05     3.38
   0.081    0.124    0.205       0.000       0.000         0.180         0.049
Biomass                        12
Geothermal                     13
Landfill Gas                   14
Wind                           15
  LILC  WIND 00     000000 00              NONE     0.00  0.00 71.00    36.   0.
  26.40  0.00  0.00       16.         9.        25.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  LILC  OTHER00     000000 00              NONE     0.00  0.00 59.78   137.   0.
 103.60  0.00  0.00      604.       476.      1080.     6.64     5.24    11.88
   0.000    0.000    0.000       0.000       0.355         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
  LILC  CGCT 0111   000000 00              GAS      0.13  0.00  0.00     1.   0.
   2.80  1.03  1.03        3.         3.         6.     0.03     0.02     0.05
   0.002    0.001    0.003       0.000       0.000         0.003         0.001
  LILC  CGCT 0112   000000 00              GAS      0.13  0.00  0.00    15.   0.
   2.80  1.03  1.03       52.        39.        91.     0.52     0.38     0.90
   0.033    0.024    0.057       0.000       0.000         0.048         0.013
  LILC  CGCC 0112   000000 00              GAS      0.19  0.00  0.00    13.   0.
  13.90  1.03  1.03       58.        34.        92.     0.44     0.25     0.69
   0.041    0.024    0.065       0.000       0.000         0.037         0.010
  LILC  CGCC 0113   000000 00              GAS      0.19  0.00  0.00    61.   0.
  13.90  1.03  1.03      205.       157.       362.     2.08     1.60     3.68
   0.195    0.149    0.344       0.000       0.000         0.195         0.053
  LILC  CGCC 0122   000000 00              GAS      0.19  0.00  0.00    43.   0.
  13.90  1.03  1.03      191.       111.       302.     1.44     0.84     2.28
   0.135    0.078    0.213       0.000       0.000         0.121         0.033
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
```

```
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2005, Region: NENG     (Emissions By Plant)
-------------------------------------------------
```

	NOx			SO2	MER	CO2	Carbon
	Emission		Generation	Emission	Emission	Trillion Emission (lb/MBtu)	Emission (lb/TBtu)
	(1000 Tons)		(GWh)	(1000 Tons)	(Tons)	(Mil Tonnes)	(Mil Tonnes)
Unit	WINTER	SUMM.	WINTER	SUMMER	Fuel Total	NOx WINTER	SO2 MERCURY SUMMER
Scrubbed Coal_NOx				1			
NENG TSDBD2831012020107 01					BF3:18.7	0.20	0.15
43.10	3.85	3.85	324.	257.	581.	3.37	2.68
0.339	0.269	0.607		0.453	0.019	0.563	
Scrubbed Coal				2			
Unscrubbed Coal_NOx				3			
NENGNHTCOLN2931012020102 01					BE3:18.4	0.46	2.20
32.20	1.45	2.45	403.	320.	722.	4.19	3.33
0.963	0.497	1.460		8.263	0.044	0.700	
NENGNHTSABC2941011010101 01					BE3:18.4	0.99	2.20
28.40	1.51	2.51	1797.	1427.	3224.	17.34	13.78
8.551	0.682	9.233		34.232	0.183	2.898	
NENG TSDBN2831012020102 01					BD2:12.5	0.20	1.50
32.20	2.45	2.45	315.	112.	428.	3.34	1.19
0.334	0.119	0.453		3.400	0.018	0.422	
NENG TSDBN2841012020102 01					BD2:12.5	0.19	1.50
32.20	2.45	2.45	589.	210.	799.	6.08	2.16

Scrubbed Coal_NOx										
NENG TSDBD2831012020107 01										
43.10	3.85	3.85	324.	257.	581.	3.37	2.68	6.04	78.	0.
0.339	0.269	0.607		0.453	0.019	0.563		0.153		
Scrubbed Coal										
Unscrubbed Coal_NOx										
NENGNHTCOLN2931012020102 01										
32.20	1.45	2.45	403.	320.	722.	4.19	3.33	7.51	97.	0.
0.963	0.497	1.460		8.263	0.044	0.700		0.191		
NENGNHTSABC2941011010101 01										
28.40	1.51	2.51	1797.	1427.	3224.	17.34	13.78	31.12	433.	0.
8.551	0.682	9.233		34.232	0.183	2.898		0.790		
NENG TSDBN2831012020102 01										
32.20	2.45	2.45	315.	112.	428.	3.34	1.19	4.53	76.	0.
0.334	0.119	0.453		3.400	0.018	0.422		0.115		
NENG TSDBN2841012020102 01										
32.20	2.45	2.45	589.	210.	799.	6.08	2.16	8.24		

```
   0.589    0.210    0.799       6.179       0.033         0.767         0.209
  NENG  TSEBN2842012020102 01              BD2:12.5 0.23  1.50  8.03   111.   0.
  32.20  2.45  0.00      127.         0.       127.     1.38     0.00     1.38
   0.159    0.000    0.159       1.035       0.006         0.129         0.035
Unscrubbed Coal                 4
  NENG  TCOLU0911012050710 01              BA2: 5.2 0.43  1.10  5.17    14.   0.
  17.40  1.54  1.54       58.        46.       104.     0.60     0.48     1.08
   0.130    0.103    0.233       0.596       0.003         0.101         0.028
  NENGCTTSABU3241012020110 01              BA2: 5.2 0.24  1.10  3.31   385.   0.
  26.40  1.54  0.00      428.         0.       428.     4.13     0.00     4.13
   0.487    0.000    0.487       2.269       0.007         0.384         0.105
  NENG  TSEBU2841012020110 01              BD2:12.5 0.36  1.50  8.03  1193.   0.
  29.30  1.54  1.54     1544.      1226.      2770.    14.38    11.42    25.80
   2.603    2.067    4.671      19.354       0.104         2.403         0.655
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  NENG  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   665.   0.
 254.10  1.32  1.32     3383.      1944.      5327.    34.43    19.78    54.21
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   506.   0.
 240.70  1.18  1.18     2574.      1726.      4300.    26.06    17.47    43.53
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   872.   0.
 211.90  1.17  1.17     4199.      2661.      6860.    42.63    27.01    69.64
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1146.   0.
 158.10  1.23  1.23     5275.      3758.      9033.    52.56    37.44    90.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1161.   0.
 122.00  0.75  0.75     4403.      4127.      8530.    44.70    41.89    86.60
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  NENG  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2059.   0.
  15.20  0.00  0.00     3489.      1724.      5212.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  NENG  CC   0122   000000 00              GAS      0.03  0.00  0.00  5859.   0.
  14.00  1.03  1.03    13655.     10166.     23821.   103.96    77.39   181.35
   1.715    1.277    2.992       0.000       0.000         9.624         2.625
  NENG  CC   0912   000000 00              GAS      0.02  0.00  0.00    33.   0.
  13.90  1.03  1.03      148.       113.       261.     1.11     0.85     1.96
   0.011    0.009    0.020       0.000       0.000         0.104         0.028
  NENG  CC   0922   000000 00              GAS      0.02  0.00  0.00  1351.   0.
  13.90  1.03  1.03     6055.      4644.     10699.    45.41    34.83    80.25
   0.454    0.348    0.802       0.000       0.000         4.259         1.161
  NENGCTCC   3222   000000 00              GAS      0.04  0.00  0.00  1684.   0.
  13.90  1.03  1.03     7547.      5536.     13084.    57.37    42.08    99.45
   1.090    0.800    1.890       0.000       0.000         5.278         1.439
  NENGNHCC   3022   000000 00              GAS      0.02  0.00  0.00  1245.   0.
  13.90  1.03  1.03     5580.      4280.      9860.    41.85    32.10    73.95
   0.418    0.321    0.739       0.000       0.000         3.925         1.070
IGCC                           10
Turbine                        11
  NENG  CT   0112   000000 00              GAS      0.11  0.00  0.00    37.   0.
   4.30  1.03  1.03        9.         6.        15.     0.08     0.06     0.15
   0.005    0.004    0.008       0.000       0.000         0.008         0.002
  NENGCTCT   3212   000000 00              GAS      0.12  0.00  0.00     6.   0.
  10.60  1.03  1.03        1.         1.         2.     0.01     0.01     0.02
   0.001    0.001    0.001       0.000       0.000         0.001         0.000
Biomass                        12
  NENG  BIOMS00  48 000000 00              B1-: 0.6 0.02  0.08  0.57   309.   0.
  44.80  5.36  5.36      962.       155.      1117.     8.82     1.42    10.24
   0.088    0.014    0.102       0.409       0.003         0.000         0.000
Geothermal                     13
```

```
Landfill Gas                    14
  NENG  LFGAS00     000000 00                WASTE    0.25  0.00  0.00    18.   0.
  78.60 10.48 10.48       81.        61.       142.     1.10     0.84     1.94
   0.135    0.103    0.238       0.000       0.000         0.000         0.000
Wind                            15
  NENG  WIND 00     000000 00                NONE     0.00  0.00 71.00    31.   0.
  26.40  0.00  0.00       14.         8.        22.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
  NENG  FCELL00     000000 00                GAS      0.40  0.00  0.00     1.   0.
  15.00  2.06  2.06        1.         1.         1.     0.01     0.00     0.01
   0.001    0.001    0.002       0.000       0.000         0.000         0.000
Solar                           17
Non Fossil_Other                18
  NENG  OTHER00     000000 00                NONE     0.00  0.00 70.72   537.   0.
 103.60  0.00  0.00     2367.      1867.      4234.    26.04    20.53    46.57
   0.000    0.000    0.000       0.000       1.647         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
  NENG  PUMPS00     000000 00                NONE     0.00  0.00 71.00  1959.   0.
   6.50  0.00  0.00        0.       186.       186.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                    21
  NENG  NHIMP00     000000 00                NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00     5638.      4069.      9706.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                        22
  NENG  CGCOU0931012050710 01              BA2: 5.2 0.43  1.10  5.17    76.   0.
  11.70  1.54  1.54      308.       248.       556.     2.63     2.12     4.75
   0.566    0.456    1.022       2.614       0.012         0.443         0.121
  NENGCTCGCOS3141012050703 01              BF3:18.7 0.20  0.15 10.84   195.   0.
  23.10  2.94  2.94      359.       416.       776.     3.48     4.03     7.51
   0.353    0.409    0.762       0.563       0.041         0.699         0.191
  NENGCTCGCOS3141012050703 01              BF2:11.1 0.20  0.15  6.43   195.   0.
  23.10  2.94  2.94      157.         0.       157.     1.52     0.00     1.52
   0.154    0.000    0.154       0.114       0.005         0.141         0.038
Cgn_Gas                         23
  NENG  CGCT 0912   000000 00                GAS      0.10  0.00  0.00     7.   0.
   2.80  1.03  1.03        2.         1.         3.     0.02     0.01     0.03
   0.001    0.001    0.001       0.000       0.000         0.001         0.000
  NENGCTCGCT 3112   000000 00                GAS      0.13  0.00  0.00     3.   0.
   2.80  1.03  1.03        1.         1.         1.     0.01     0.00     0.01
   0.000    0.000    0.001       0.000       0.000         0.001         0.000
  NENG  CGCC 0113   000000 00                GAS      0.12  0.00  0.00    13.   0.
  13.90  1.03  1.03        3.         2.         5.     0.03     0.02     0.05
   0.002    0.001    0.003       0.000       0.000         0.003         0.001
  NENG  CGCC 0122   000000 00                GAS      0.12  0.00  0.00   661.   0.
  13.90  1.03  1.03      188.       273.       461.     1.50     2.18     3.68
   0.091    0.132    0.223       0.000       0.000         0.195         0.053
  NENG  CGCC 0123   000000 00                GAS      0.13  0.00  0.00   132.   0.
  13.90  1.03  1.03       30.        23.        52.     0.28     0.22     0.50
   0.018    0.014    0.032       0.000       0.000         0.026         0.007
  NENGCTCGCC 3112   000000 00                GAS      0.20  0.00  0.00    13.   0.
  13.90  1.03  1.03        3.         7.        10.     0.02     0.05     0.08
   0.002    0.005    0.008       0.000       0.000         0.004         0.001
  NENGCTCGCC 3113   000000 00                GAS      0.20  0.00  0.00     1.   0.
  14.90  1.03  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENGCTCGCC 3122   000000 00                GAS      0.04  0.00  0.00    32.   7.
  15.60  1.13  1.13        7.        16.        24.     0.06     0.13     0.19
   0.001    0.003    0.004       0.000       0.000         0.010         0.003
  NENGCTCGCC 3123   000000 00                GAS      0.04  0.00  0.00    73.   6.
  16.50  0.00  1.13        0.        13.        13.     0.00     0.12     0.12
   0.000    0.002    0.002       0.000       0.000         0.007         0.002
Cgn_Oil                         24
```

```
Cgn_Other                       25
  NENG  CGBIO00  48 000000 00              B1-: 0.6 0.02  0.08  0.57    72.   0.
  44.80  5.36  5.36      312.       241.       553.     2.66     2.06     4.72
   0.027    0.021    0.047       0.189       0.001         0.000         0.000
  NENG  CGOTH00     000000 00              NONE     0.00  0.00 52.33    27.   0.
 103.60  0.00  0.00      117.        90.       207.     0.19     0.14     0.33
   0.000    0.000    0.000       0.000       0.009         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
  NENGCTTSABU3241012020110 01     ML02     BA2: 5.2 0.24  0.04  1.76    35.  26.
  36.57  2.51  2.51      144.       115.       259.     1.42     1.13     2.55
   0.168    0.133    0.301       0.056       0.002         0.237         0.065
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
  NENG  TSEBU2841012020110 01     SCR1     BD2:12.5 0.05  1.50  8.03   821.   9.
  29.80  2.49  2.49     3407.      2706.      6114.    31.74    25.21    56.95
   0.794    0.630    1.424      42.715       0.229         5.304         1.446
Ret.ExistScrub & SCR            41
  NENGCTCGCOS3141012050703 01     SCR1     BF3:18.7 0.05  0.15  1.87    68.  10.
  23.70  2.94  3.94      273.       221.       494.     2.65     2.14     4.78
   0.066    0.053    0.120       0.359       0.004         0.445         0.121
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
  NENGCTTSABU3241012020110 01     RL02     BA2: 5.2 0.05  0.04  0.52   117.  34.
  37.07  3.43  3.43      485.       385.       870.     4.77     3.79     8.56
   0.119    0.095    0.214       0.188       0.002         0.797         0.217
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
Ret.ExistScrub+GasR             47
Ret.GasReburn+Scrub             48
Ret.ACI                         49
Ret.ExistScrub&ACI              50
Ret.ExistSCR&ACI                51
Ret.ExistSNCR&ACI               52
Ret.ACI & SCR                   53
Ret.ExistScrub&ACI&SCR          54
Ret.ACI & SNCR                  55
Ret.ExistScrub&ACI&SNCR         56
Ret.ACI & Srub                  57
Ret.ExistSCR&ACI&Scrub          58
Ret.ExistSNCR&ACI&Scrub         59
Ret.ExistSNCR&ExistScrub&ACI    60
Ret.ExistSCR&ExistScrub&ACI     61
Ret.ExistNOx&ExistScrub&ACI     62
Ret.SCR & Scrub & ACI           63
Ret.SNCR & Scrub & ACI          64
Ret.O/G SCR                     65
Ret.O/G SNCR                    66
Ret.Nuclear (age 30+10 yrs)     67
Ret.Nuclear (age 40+20 yrs)     68
Ret. Biomass Cofiring           69
CT Early Retirement             70
CC Early Retirement             71
```

O/G Early Retirement 72
Coal Early Retirement 73
Nuke Early Retirement 74

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation reported in BBtu

---

Year: 2005, Region: FRCC (Emissions By Plant)

	NOx			SO2		MER		CO2		Carbon	
	Emission		Generation	Emission		Emission		Trillion Emission		Emission	
	(1000 Tons)		(GWh)	(1000 Tons)		(Tons)		(Mil Tonnes)		(Mil Tonnes)	
Unit	WINTER	SUMMER	WINTER	SUMMER		Fuel Total	NOx WINTER	SO2 SUMMER	MERCURY	Cap. Total	Cap
Scrubbed Coal_NOx					1						
FRCCFLTSXBA1541122020105 01						BG1: 8.0	0.15	0.20	0.80	441.	0.
23.60	3.91	3.91	1830.	1454.		3284.	19.03	15.12		34.15	
1.428	1.134	2.561		3.415		0.014		3.180		0.867	
FRCCFLTSXBA1541132020105 01						BG1: 8.0	0.84	0.25	2.73	430.	0.
38.30	2.91	2.91	1785.	1417.		3202.	17.05	13.54		30.59	
7.161	5.687	12.848		3.824		0.042		2.849		0.777	
FRCCFLTSABA1541132020105 01						BE1: 6.1	0.84	0.11	2.07	842.	0.
43.30	2.91	2.91	3494.	2775.		6270.	33.22	26.38		59.60	
13.952	11.081	25.032		3.278		0.062		5.550		1.514	
FRCCFLTSZBA1541122020105 01						BG1: 8.0	0.10	0.25	0.80	439.	0.
36.20	3.91	3.91	1822.	1447.		3269.	17.30	13.74		31.05	
0.865	0.687	1.552		3.881		0.012		2.891		0.789	
Scrubbed Coal					2						
FRCCFLTSEBS1541132020103 01						BF1: 6.8	0.46	1.03	2.32	844.	0.
42.70	2.94	2.94	3503.	2782.		6285.	35.92	28.53		64.45	
8.280	6.576	14.856		33.062		0.075		6.002		1.637	
FRCCFLTSGBS1531132020103 01						BF1: 6.8	0.31	1.07	2.32	88.	0.
43.00	2.94	2.94	365.	290.		655.	3.76	2.99		6.75	
0.574	0.456	1.029		3.624		0.008		0.629		0.171	
FRCCFLTSGBS1532132020103 01						BF1: 6.8	0.35	1.02	2.32	87.	0.
43.00	2.94	2.94	361.	287.		648.	3.86	3.07		6.93	
0.678	0.538	1.217		3.546		0.008		0.646		0.176	
FRCCFLTSGBS1541132020103 01						BF1: 6.8	0.40	0.76	2.32	356.	0.
43.00	2.94	2.94	1477.	1173.		2651.	15.15	12.03		27.18	
2.992	2.376	5.368		10.316		0.032		2.531		0.690	
FRCCFLTSZBS1541121020103 01						BG1: 8.0	0.53	0.29	2.73	957.	0.
35.60	2.94	2.94	3972.	3154.		7126.	38.34	30.45		68.79	
10.217	8.115	18.332		9.974		0.094		6.406		1.747	
FRCCFLTSZBS1541122020103 01						BG1: 8.0	0.45	0.50	2.73	2315.	0.
35.60	2.94	2.94	9608.	7631.		17238.	93.50	74.26		167.76	
21.131	16.783	37.914		41.940		0.229		15.622		4.261	
Unscrubbed Coal_NOx					3						
Unscrubbed Coal					4						
FRCCFLTCOLU1531132020110 01						BB1: 3.4	0.46	1.00	2.18	92.	0.
32.00	1.54	1.54	382.	0.		382.	3.97	0.00		3.97	
0.913	0.000	0.913		1.985		0.004		0.370		0.101	
FRCCFLTCOLU1531132020110 01						BB2: 4.1	0.46	1.00	2.62	92.	0.

```
  32.00  1.54  1.54        0.       303.       303.     0.00     3.15     3.15
   0.000    0.725    0.725       1.577       0.004         0.294         0.080
  FRCCFLTSDBU1541131020110 01              BB1: 3.4 0.51  1.00  2.18  1394.   0.
  17.40  1.54  1.54     5785.      2532.      8318.    54.06    23.66    77.73
  13.705    5.999   19.704      38.864       0.085         7.238         1.974
  FRCCFLTSDBU1541131020110 01              BB2: 4.1 0.51  1.00  2.62  1394.   0.
  17.40  1.54  1.54        0.      2062.      2062.     0.00    19.27    19.27
   0.000    4.886    4.886       9.637       0.025         1.795         0.490
  FRCCFLTSDBU1541132020110 01              BB1: 3.4 0.37  1.00  2.18   833.   0.
  28.90  1.54  1.54     3457.      2746.      6203.    32.93    26.16    59.09
   6.142    4.878   11.020      29.544       0.064         5.502         1.501
  FRCCFLTSDBU1541132020210 01              BB2: 4.1 0.31  1.00  3.69   218.   0.
  17.40  1.54  1.54      905.       719.      1623.     9.23     7.33    16.56
   1.435    1.140    2.575       8.279       0.031         1.542         0.421
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  FRCC  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   847.   0.
  93.80  0.53  0.53     3987.      3107.      7094.    43.55    33.94    77.49
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  FRCC  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   700.   0.
 155.20  0.57  0.57     3188.      2473.      5660.    35.14    27.26    62.39
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  FRCC  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   700.   0.
 155.20  0.57  0.57     3414.      2475.      5889.    37.60    27.27    64.87
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  FRCC  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   842.   0.
 182.80  1.24  1.24     3872.      2780.      6651.    41.31    29.66    70.97
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  FRCC  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   847.   0.
  93.80  0.53  0.53     3488.      3011.      6499.    38.73    33.43    72.16
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  FRCC  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00    47.   0.
  15.10  0.00  0.00       83.        38.       121.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  FRCCFLCC   1512   000000 00              GAS      0.05  0.00  0.00    85.   0.
  19.90  1.03  1.03       19.        44.        63.     0.15     0.34     0.49
   0.004    0.009    0.013       0.000       0.000         0.026         0.007
  FRCCFLCC   1513   000000 00              GAS      0.11  0.00  0.00    89.   0.
  14.50  0.00  1.03        0.        46.        46.     0.00     0.45     0.45
   0.000    0.024    0.024       0.000       0.000         0.024         0.007
  FRCCFLCC   1522   000000 00              GAS      0.05  0.00  0.00 15348.   0.
  14.10  1.03  1.03    28306.     32562.     60868.   219.34   252.32   471.67
   5.593    6.434   12.027       0.000       0.000        25.031         6.827
IGCC                           10
  FRCCFLIGCC 1541122050710 00              BG1: 8.0 0.10  0.00  0.40   250.   0.
  31.40  1.00  1.00     1083.       837.      1921.     7.88     6.09    13.97
   0.394    0.305    0.699       0.000       0.003         1.301         0.355
Turbine                        11
  FRCCFLCT   1512   000000 00              GAS      0.10  0.00  0.00    68.   0.
   4.60  0.00  1.03        0.        35.        35.     0.00     0.37     0.37
   0.000    0.019    0.019       0.000       0.000         0.019         0.005
  FRCCFLCT   1522   000000 00              GAS      0.08  0.00  0.00  5658.   0.
   3.00  0.00  1.03        0.      1590.      1590.     0.00    17.45    17.45
   0.000    0.715    0.715       0.000       0.000         0.926         0.253
Biomass                        12
  FRCC  BIOMS00  49 000000 00              B1-: 0.6 0.02  0.08  0.57    54.   0.
  44.80  5.36  5.36      234.       181.       415.     2.16     1.67     3.83
   0.022    0.017    0.038       0.153       0.001         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  FRCC  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     2.   0.
  78.60 10.48 10.48        9.         7.        16.     0.12     0.09     0.22
```

```
   0.015    0.011    0.026       0.000       0.000         0.000         0.000
Wind                           15
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  FRCC  OTHER00     000000 00              NONE     0.00  0.00 60.92   424.   0.
 103.60  0.00  0.00     1869.      1474.      3343.    20.56    16.21    36.77
   0.000    0.000    0.000       0.000       1.120         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
Cgn_Coal                       22
  FRCCFLCGCOU1541132050710 01            BB2: 4.1 0.46  1.00  4.10   653.   0.
  12.70  1.54  1.54     2643.      2133.      4777.    26.06    21.03    47.10
   5.955    4.806   10.762      23.548       0.097         4.386         1.196
Cgn_Gas                        23
  FRCCFLCGCT 1512   000000 00              GAS      0.11  0.00  0.00    27.   0.
   2.80  0.00  1.03        0.        14.        14.     0.00     0.14     0.14
   0.000    0.008    0.008       0.000       0.000         0.007         0.002
  FRCCFLCGCC 1513   000000 00              GAS      0.14  0.00  0.00    18.   0.
  13.90  0.00  1.03        0.         9.         9.     0.00     0.09     0.09
   0.000    0.006    0.006       0.000       0.000         0.005         0.001
  FRCCFLCGCC 1522   000000 00              GAS      0.14  0.00  0.00   437.   0.
  13.90  1.03  1.03       98.       225.       323.     0.79     1.82     2.60
   0.056    0.128    0.184       0.000       0.000         0.138         0.038
  FRCCFLCGCC 1523   000000 00              GAS      0.14  0.00  0.00   454.   0.
  13.90  1.03  1.03       60.       234.       294.     0.58     2.25     2.83
   0.041    0.159    0.200       0.000       0.000         0.150         0.041
Cgn_Oil                        24
  FRCCFLCGGAU1511   000000 00              GAS      0.29  0.00  0.00    16.   0.
  11.70  0.00  2.57        0.        17.        17.     0.00     0.14     0.14
   0.000    0.021    0.021       0.000       0.000         0.008         0.002
Cgn_Other                      25
  FRCC  CGBIO00  49 000000 00            B1-: 0.6 0.02  0.08  0.57    61.   0.
  44.80  5.36  5.36      264.       204.       469.     2.26     1.74     4.00
   0.023    0.017    0.040       0.160       0.001         0.000         0.000
  FRCC  CGOTH00     000000 00              NONE     0.00  0.00  0.00    22.   0.
 103.60  0.00  0.00       95.        74.       169.     0.73     0.57     1.30
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
```

```
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------
Year: 2005, Region: VACA     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  VACAVATSXBD0341092020307 01              BF2:11.1 0.30  0.12  0.33   882.   0.
  23.30  2.85  3.85     3660.      2907.      6568.    38.07    30.23    68.30
   5.634    2.903    8.537       4.098       0.011         6.361         1.735
  VACA  TSXBA0641101020105 01              BF2:11.1 0.59  0.15  3.77   270.   0.
  38.30  2.91  3.91     1121.       890.      2010.    11.18     8.88    20.05
   3.285    0.262    3.547       1.504       0.026         1.867         0.509
  VACA  TSXBA0641102020105 01              BF2:11.1 0.39  0.15  3.77  1100.   0.
  29.80  2.91  3.91     4565.      3626.      8191.    43.46    34.52    77.98
   8.540    0.673    9.213       5.848       0.101         7.261         1.980
  VACA  TSXBA0642101020105 01              BF2:11.1 0.57  0.15  3.77   270.   0.
  36.20  2.91  3.91     1121.       890.      2010.    11.89     9.44    21.33
   3.383    0.269    3.652       1.600       0.028         1.987         0.542
  VACAVATSBBA0341092020105 01              BF2:11.1 0.10  0.15  3.77   373.   0.
  43.50  2.91  3.91     1548.      1229.      2777.    14.59    11.59    26.18
   0.730    0.058    0.788       1.964       0.034         2.438         0.665
  VACAWVTSABA0641052020105 01              BF2:11.1 0.10  0.15  3.77  1066.   0.
  43.50  2.91  3.91     4424.      3514.      7938.    41.03    32.59    73.62
```

2.052 0.163 2.215 5.522 0.095 6.856 1.870
VACA TSZBA0641052020105 01 BG1: 8.0 0.10 0.25 2.73 521. 0.
43.30 2.91 3.91 2162. 1717. 3880. 21.20 16.83 38.03
1.060 0.084 1.144 4.754 0.036 3.542 0.966
VACAVATCOLD0331092050308 01 BF2:11.1 0.38 0.11 4.44 57. 0.
23.30 2.85 3.85 237. 188. 424. 2.46 1.95 4.41
0.464 0.239 0.703 0.232 0.010 0.411 0.112
Scrubbed Coal 2
VACANCTCOLS0641102050304 01 BE2:10.4 0.39 0.53 4.18 167. 0.
23.10 2.94 2.94 142. 550. 692. 1.47 5.72 7.20
0.283 1.102 1.385 1.900 0.015 0.670 0.183
VACANCTCOLS0641102050304 01 BE1: 6.1 0.39 0.53 2.43 167. 0.
23.10 2.94 2.94 552. 0. 552. 5.74 0.00 5.74
1.104 0.000 1.104 1.514 0.007 0.534 0.146
VACAVATCOLS0331092050304 01 BF2:11.1 0.38 0.08 4.44 35. 0.
23.10 2.94 2.94 145. 115. 261. 1.51 1.20 2.71
0.285 0.226 0.511 0.106 0.006 0.252 0.069
VACA TABS 0631042050304 01 BG1: 8.0 0.28 0.20 3.22 74. 0.
23.10 2.94 2.94 0. 244. 244. 0.00 2.54 2.54
0.000 0.351 0.351 0.254 0.004 0.236 0.064
VACA TABS 0631042050304 01 BG2:17.4 0.28 0.20 6.97 74. 0.
23.10 2.94 2.94 307. 0. 307. 3.19 0.00 3.19
0.442 0.000 0.442 0.319 0.011 0.297 0.081
VACA TSXBS0641102020304 01 BF2:11.1 0.15 0.12 0.55 385. 0.
23.10 2.94 2.94 1598. 1269. 2867. 16.62 13.20 29.81
1.246 0.990 2.236 1.789 0.008 2.776 0.757
Unscrubbed Coal_NOx 3
VACANCTSABC0641101020201 01 BA2: 5.2 0.59 1.10 4.65 700. 0.
18.00 1.51 2.51 2905. 2307. 5212. 27.51 21.85 49.36
8.130 0.645 8.774 27.149 0.115 4.597 1.254
VACANCTSBBN0641102020102 01 BA2: 5.2 0.40 1.10 3.31 514. 0.
32.20 1.45 2.45 0. 594. 594. 0.00 5.60 5.60
0.000 0.734 0.734 3.081 0.009 0.522 0.142
VACANCTSBBN0641102020102 01 BD1: 5.1 0.40 1.50 3.24 514. 0.
32.20 1.45 2.45 2133. 825. 2958. 20.12 7.78 27.90
4.054 1.019 5.073 20.925 0.045 2.598 0.709
VACAVATSBBN0341091020102 01 BA2: 5.2 0.53 1.10 3.31 389. 0.
32.20 1.45 2.45 1352. 824. 2177. 13.85 8.44 22.29
3.691 1.460 5.151 12.259 0.037 2.076 0.566
VACAVATSBBN0341092020102 01 BA2: 5.2 0.34 1.10 3.31 159. 0.
32.20 1.45 2.45 0. 255. 255. 0.00 2.50 2.50
0.000 0.274 0.274 1.377 0.004 0.233 0.064
VACAVATSBBN0341092020102 01 BD1: 5.1 0.34 1.50 3.24 159. 0.
32.20 1.45 2.45 660. 184. 844. 6.47 1.80 8.28
1.091 0.197 1.288 6.208 0.013 0.771 0.210
VACAVATSBBN0341092020202 01 BA2: 5.2 0.43 1.10 4.65 156. 0.
32.20 1.45 2.45 647. 331. 978. 6.34 3.24 9.58
1.350 0.448 1.798 5.266 0.022 0.892 0.243
VACANCTSDBC0641101020101 01 BD1: 5.1 0.55 1.50 3.24 2240. 0.
27.00 1.51 2.51 9296. 7383. 16680. 83.86 66.61 150.47
23.062 1.832 24.894 112.851 0.244 14.012 3.821
VACASCTSEBC0641102020101 01 BD1: 5.1 0.44 1.50 3.24 1180. 0.
27.00 1.51 2.51 4897. 3889. 8787. 47.89 38.03 85.92
10.560 0.837 11.396 64.443 0.139 8.001 2.182
VACASCTSEBC0641102020401 01 BD1: 5.1 0.45 1.50 1.01 350. 0.
27.00 1.51 2.51 1453. 1154. 2606. 14.24 11.31 25.54
3.210 0.254 3.464 19.156 0.013 2.378 0.649
VACANCTSBBC0641101020101 01 BD1: 5.1 0.53 1.50 3.24 385. 0.
32.50 1.51 2.51 1598. 1269. 2867. 14.80 11.76 26.56
3.893 0.312 4.204 19.919 0.043 2.473 0.675
VACANCTSBBC0641102020101 01 BD1: 5.1 0.45 1.50 3.24 354. 0.
27.00 1.51 2.51 1469. 1167. 2636. 13.93 11.07 25.00
3.107 0.249 3.357 18.752 0.041 2.328 0.635
VACAVATSBBC0341092020101 01 BA2: 5.2 0.10 1.10 3.31 1150. 0.
29.30 1.51 2.51 0. 3791. 3791. 0.00 35.74 35.74

0.000 0.179 0.179 19.656 0.059 3.328 0.908
VACAVATSBBC0341092020101 01 BD1: 5.1 0.10 1.50 3.24 1150. 0.
29.30 1.51 2.51 4773. 0. 4773. 45.00 0.00 45.00
2.250 0.000 2.250 33.748 0.073 4.190 1.143
VACANCTOLBO0632102020202 01 BA2: 5.2 0.42 1.10 4.65 76. 0.
32.30 0.54 1.54 154. 73. 227. 1.65 0.79 2.44
0.346 0.107 0.453 1.343 0.006 0.227 0.062
VACANCTOLBO0632102020202 01 BD1: 5.1 0.42 1.50 4.56 76. 0.
32.30 0.54 1.54 111. 88. 198. 1.19 0.95 2.14
0.249 0.129 0.377 1.602 0.005 0.199 0.054
VACANCTSGBC0641102020101 01 BA2: 5.2 0.31 1.10 3.31 562. 0.
27.00 1.51 2.51 0. 1159. 1159. 0.00 11.51 11.51
0.000 0.178 0.178 6.330 0.019 1.072 0.292
VACANCTSGBC0641102020101 01 BD1: 5.1 0.31 1.50 3.24 562. 0.
27.00 1.51 2.51 2332. 693. 3026. 23.16 6.88 30.04
3.578 0.107 3.684 22.529 0.049 2.797 0.763
VACA TSHBO0632102020202 01 BA2: 5.2 0.35 1.10 4.65 200. 0.
32.30 0.54 1.54 695. 387. 1082. 7.96 4.43 12.39
1.389 0.502 1.892 6.814 0.029 1.154 0.315
Unscrubbed Coal 4
VACA TCOLU0631041050710 01 BA2: 5.2 0.55 1.10 5.17 74. 0.
11.70 1.54 1.54 307. 157. 464. 3.19 1.63 4.82
0.882 0.450 1.332 2.653 0.012 0.449 0.123
VACA TCOLU0631102050710 01 BA2: 5.2 0.11 0.12 5.17 55. 0.
11.70 1.54 1.54 228. 181. 410. 2.05 1.63 3.69
0.113 0.090 0.203 0.223 0.010 0.343 0.094
VACANCTCOLU0631102020110 01 BA2: 5.2 0.46 1.10 3.31 98. 0.
32.00 1.54 1.54 198. 145. 343. 2.06 1.50 3.56
0.474 0.346 0.820 1.961 0.006 0.332 0.091
VACANCTCOLU0631102020110 01 BD1: 5.1 0.46 1.50 3.24 98. 0.
32.00 1.54 1.54 143. 0. 143. 1.48 0.00 1.48
0.341 0.000 0.341 1.112 0.002 0.138 0.038
VACANCTCOLU0631102020210 01 BA2: 5.2 0.40 1.10 4.65 189. 0.
32.00 1.54 1.54 0. 400. 400. 0.00 4.16 4.16
0.000 0.833 0.833 2.290 0.010 0.388 0.106
VACANCTCOLU0631102020210 01 BD1: 5.1 0.40 1.50 4.56 189. 0.
32.00 1.54 1.54 657. 0. 657. 6.83 0.00 6.83
1.367 0.000 1.367 5.125 0.016 0.636 0.174
VACAVATCOLU0331092050710 01 BA2: 5.2 0.38 1.10 5.17 57. 0.
11.70 1.54 1.54 198. 121. 319. 2.06 1.26 3.32
0.388 0.237 0.625 1.824 0.009 0.309 0.084
VACANCTOLBU0632101020210 01 BA2: 5.2 0.63 1.10 4.65 97. 0.
32.00 1.54 0.00 196. 0. 196. 2.21 0.00 2.21
0.693 0.000 0.693 1.217 0.005 0.206 0.056
VACANCTOLBU0632101020210 01 BD1: 5.1 0.63 1.50 4.56 97. 0.
32.00 1.54 0.00 141. 0. 141. 1.59 0.00 1.59
0.499 0.000 0.499 1.194 0.004 0.148 0.040
VACANCTOLBU0632102020110 01 BA2: 5.2 0.44 1.10 3.31 79. 0.
32.00 1.54 1.54 160. 25. 185. 1.70 0.27 1.97
0.377 0.060 0.437 1.083 0.003 0.183 0.050
VACANCTOLBU0632102020110 01 BD1: 5.1 0.44 1.50 3.24 79. 0.
32.00 1.54 1.54 115. 91. 206. 1.22 0.97 2.20
0.272 0.216 0.487 1.647 0.004 0.204 0.056
VACAVATOLBU0332092020110 01 BA2: 5.2 0.32 1.10 3.31 100. 0.
32.00 1.54 1.54 121. 32. 153. 1.34 0.36 1.70
0.218 0.058 0.276 0.935 0.003 0.158 0.043
VACAVATOLBU0332092020110 01 BD1: 5.1 0.32 1.50 3.24 100. 0.
32.00 1.54 1.54 146. 116. 261. 1.61 1.28 2.89
0.262 0.208 0.470 2.171 0.005 0.270 0.074
VACAVATOLBU0332092020210 01 BA2: 5.2 0.41 1.10 4.65 71. 0.
32.00 1.54 0.00 189. 0. 189. 2.10 0.00 2.10
0.429 0.000 0.429 1.156 0.005 0.196 0.053
VACANCTSABU0641102020210 01 BA2: 5.2 0.35 1.10 4.65 745. 0.
17.40 1.54 1.54 3092. 2057. 5149. 29.55 19.66 49.20
5.230 3.479 8.709 27.061 0.114 4.582 1.250

VACANCTSBBU0631102020110 01 BA2: 5.2 0.37 1.10 3.31 78. 0.
32.00 1.54 1.54 0. 165. 165. 0.00 1.71 1.71
0.000 0.320 0.320 0.942 0.003 0.159 0.043
VACANCTSBBU0631102020110 01 BD1: 5.1 0.37 1.50 3.24 78. 0.
32.00 1.54 1.54 271. 0. 271. 2.81 0.00 2.81
0.525 0.000 0.525 2.107 0.005 0.262 0.071
VACANCTSBBU0641102020110 01 BD1: 5.1 0.43 1.50 3.24 1880. 0.
27.20 1.54 1.54 7802. 5191. 12993. 73.84 49.13 122.97
15.839 10.537 26.376 92.225 0.200 11.451 3.123
VACANCTSBBU0641102020210 01 BA2: 5.2 0.36 1.10 4.65 106. 0.
32.00 1.54 1.54 369. 225. 593. 3.81 2.32 6.14
0.679 0.414 1.093 3.376 0.014 0.572 0.156
VACA TSCBU0631102020110 01 BA2: 5.2 0.43 1.10 3.31 170. 0.
32.00 1.54 1.54 344. 360. 704. 3.56 3.73 7.29
0.769 0.806 1.574 4.009 0.012 0.679 0.185
VACA TSCBU0631102020110 01 BD1: 5.1 0.43 1.50 3.24 170. 0.
32.00 1.54 1.54 247. 0. 247. 2.56 0.00 2.56
0.553 0.000 0.553 1.921 0.004 0.239 0.065
VACA TSCBU0641102020110 01 BD1: 5.1 0.44 1.50 3.24 306. 0.
26.40 1.54 1.54 1270. 648. 1918. 12.73 6.50 19.22
2.825 1.442 4.268 14.419 0.031 1.790 0.488
VACANCTSDBU0641102020110 01 BD1: 5.1 0.35 1.50 3.24 2090. 0.
28.50 1.54 1.54 8674. 6889. 15563. 78.65 62.47 141.12
13.646 10.838 24.485 105.842 0.229 13.142 3.584
VACASCTSEBU0641102020110 01 BD1: 5.1 0.33 1.50 3.24 250. 0.
32.00 1.54 1.54 505. 401. 907. 5.10 4.05 9.16
0.847 0.673 1.520 6.868 0.015 0.853 0.233
VACASCTSEBU0641102020110 01 BA2: 5.2 0.33 1.10 3.31 250. 0.
32.00 1.54 1.54 364. 289. 653. 3.67 2.92 6.59
0.610 0.484 1.094 3.626 0.011 0.614 0.167
VACASCTSEBU0641102020310 01 BD1: 5.1 0.40 1.50 0.56 432. 0.
32.00 1.54 1.54 1793. 1193. 2986. 17.45 11.61 29.06
3.464 2.304 5.768 21.794 0.008 2.706 0.738
VACANCTSGBU0641101020110 01 BA2: 5.2 0.61 1.10 3.31 165. 0.
32.00 1.54 0.00 333. 0. 333. 3.47 0.00 3.47
1.068 0.000 1.068 1.911 0.006 0.324 0.088
VACANCTSGBU0641101020110 01 BD1: 5.1 0.61 1.50 3.24 165. 0.
32.00 1.54 0.00 240. 0. 240. 2.50 0.00 2.50
0.769 0.000 0.769 1.876 0.004 0.233 0.064
VACANCTSGBU0641101020210 01 BA2: 5.2 0.52 1.10 4.65 265. 0.
32.00 1.54 1.54 1100. 255. 1355. 10.97 2.55 13.51
2.847 0.660 3.507 7.433 0.031 1.258 0.343
VACANCTSGBU0641101020210 01 BD1: 5.1 0.52 1.50 4.56 265. 0.
32.00 1.54 1.54 0. 306. 306. 0.00 3.05 3.05
0.000 0.793 0.793 2.291 0.007 0.284 0.078
VACANCTSGBU0641102020110 01 BA2: 5.2 0.37 1.10 3.31 275. 0.
32.00 1.54 1.54 0. 441. 441. 0.00 4.34 4.34
0.000 0.805 0.805 2.386 0.007 0.404 0.110
VACANCTSGBU0641102020110 01 BD1: 5.1 0.37 1.50 3.24 275. 0.
32.00 1.54 1.54 1141. 318. 1459. 11.22 3.12 14.34
2.081 0.580 2.660 10.756 0.023 1.336 0.364
VACANCTSGBU0641102020210 01 BA2: 5.2 0.36 1.10 4.65 526. 0.
32.00 1.54 1.54 1829. 1114. 2943. 18.37 11.20 29.57
3.298 2.010 5.308 16.263 0.069 2.754 0.751
VACANCTSGBU0642101020110 01 BA2: 5.2 0.54 1.10 3.31 165. 0.
32.00 1.54 1.54 574. 53. 627. 6.11 0.56 6.67
1.639 0.151 1.791 3.668 0.011 0.621 0.169
VACANCTSGBU0642101020110 01 BD1: 5.1 0.54 1.50 3.24 165. 0.
32.00 1.54 1.54 0. 191. 191. 0.00 2.03 2.03
0.000 0.545 0.545 1.523 0.003 0.189 0.052
VACANCTSGBU0642102020110 01 BA2: 5.2 0.34 1.10 3.31 142. 0.
32.00 1.54 1.54 494. 301. 795. 5.30 3.23 8.53
0.901 0.549 1.449 4.689 0.014 0.794 0.217
VACA TSHBU0631102020110 01 BA2: 5.2 0.37 1.10 3.31 250. 0.
32.00 1.54 1.54 0. 241. 241. 0.00 2.42 2.42

```
   0.000    0.446    0.446       1.329       0.004         0.225         0.061
  VACA  TSHBU0631102020110 01              BD1: 5.1 0.37  1.50  3.24   250.   0.
  32.00  1.54  1.54      869.       289.      1158.     8.73     2.90    11.63
   1.610    0.535    2.145       8.720       0.019         1.083         0.295
  VACA  TSHBU0641102020110 01              BA2: 5.2 0.35  1.10  3.31   174.   0.
  32.00  1.54  1.54        0.       279.       279.     0.00     2.72     2.72
   0.000    0.473    0.473       1.496       0.004         0.253         0.069
  VACA  TSHBU0641102020110 01              BD1: 5.1 0.35  1.50  3.24   174.   0.
  32.00  1.54  1.54      722.       201.       923.     7.03     1.96     8.99
   1.224    0.341    1.564       6.743       0.015         0.837         0.228
  VACA  TSHBU0641102020210 01              BA2: 5.2 0.36  1.10  4.65   170.   0.
  32.00  1.54  1.54      706.       360.      1066.     7.06     3.60    10.66
   1.277    0.652    1.929       5.861       0.025         0.992         0.271
  VACANCTSKBU0632102020210 01              BA2: 5.2 0.38  1.10  4.65   322.   0.
  32.00  1.54  0.00      130.         0.       130.     1.53     0.00     1.53
   0.292    0.000    0.292       0.841       0.004         0.142         0.039
  VACANCTSKBU0632102020210 01              BD1: 5.1 0.38  1.50  4.56   322.   0.
  32.00  1.54  0.00      469.         0.       469.     5.51     0.00     5.51
   1.052    0.000    1.052       4.130       0.013         0.513         0.140
  VACANCTSKBU0641102020210 01              BA2: 5.2 0.40  1.10  4.65   266.   0.
  32.00  1.54  1.54      538.       256.       794.     5.53     2.64     8.17
   1.099    0.523    1.622       4.494       0.019         0.761         0.208
  VACANCTSKBU0641102020210 01              BD1: 5.1 0.40  1.50  4.56   266.   0.
  32.00  1.54  1.54      387.       307.       695.     3.98     3.16     7.15
   0.791    0.628    1.419       5.362       0.016         0.666         0.182
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   701.   0.
 137.70  0.51  0.51     3361.      2538.      5899.    34.15    25.79    59.95
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   854.   0.
 147.10  0.66  0.66     3828.      2913.      6741.    39.85    30.33    70.17
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   854.   0.
 147.10  0.66  0.66     4345.      2769.      7114.    44.82    28.56    73.38
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   827.   0.
 134.20  0.46  0.46     3930.      2797.      6727.    39.57    28.16    67.73
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   915.   0.
  82.10  0.42  0.42     4540.      3232.      7772.    45.48    32.38    77.85
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   904.   0.
 132.10  0.42  0.42     4259.      3316.      7575.    44.58    34.72    79.30
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1140.   0.
  83.40  0.47  0.47     5489.      4006.      9496.    55.36    40.40    95.75
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1100.   0.
  91.60  0.49  0.49     5113.      4035.      9148.    53.56    42.26    95.82
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1100.   0.
  91.60  0.49  0.49     5335.      3708.      9043.    54.62    37.96    92.58
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   854.   0.
 147.10  0.66  0.66     2861.      3133.      5994.    29.61    32.42    62.03
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   810.   0.
 134.20  0.46  0.46     3271.      2971.      6242.    32.93    29.92    62.85
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   900.   0.
  99.90  0.53  0.53     2992.      3301.      6294.    30.29    33.42    63.71
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1140.   0.
```

```
  83.40  0.47  0.47     5059.      3927.      8986.    51.30    39.82    91.11
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   976.   0.
  87.80  0.51  0.51     3489.      3326.      6814.    37.47    35.72    73.19
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   940.   0.
  68.60  0.35  0.35     4671.      2685.      7357.    46.95    26.99    73.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   932.   0.
  68.60  0.35  0.35     3833.      3419.      7252.    38.53    34.36    72.89
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  VACA  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  3799.   0.
  15.20  0.00  0.00     6437.      3139.      9575.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  VACA  CC   0622   000000 00              GAS      0.02  0.00  0.00   450.   0.
  13.90  1.03  1.03      101.       232.       332.     0.76     1.74     2.49
   0.008    0.017    0.025       0.000       0.000         0.132         0.036
  VACANCCC   0613   000000 00              GAS      0.10  0.00  0.00    84.   0.
  19.90  0.00  1.03        0.        14.        14.     0.00     0.16     0.16
   0.000    0.008    0.008       0.000       0.000         0.008         0.002
  VACANCCC   0622   000000 00              GAS      0.02  0.00  0.00   940.   0.
  13.90  1.03  1.03      210.       484.       694.     1.58     3.63     5.21
   0.016    0.036    0.052       0.000       0.000         0.276         0.075
  VACAVACC   0322   000000 00              GAS      0.08  0.00  0.00  2336.   0.
  13.90  0.00  1.03        0.      1203.      1203.     0.00     9.71     9.71
   0.000    0.374    0.374       0.000       0.000         0.516         0.141
IGCC                            10
Turbine                         11
  VACANCCT   0611   000000 00              GAS      0.10  0.00  0.00     1.   0.
   2.80  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACAVACT   0312   000000 00              GAS      0.10  0.00  0.00    28.   0.
   2.80  0.00  1.03        0.         5.         5.     0.00     0.05     0.05
   0.000    0.002    0.002       0.000       0.000         0.002         0.001
Biomass                         12
  VACA  BIOMS00  50 000000 00              B1-: 0.6 0.02  0.08  0.57    47.   0.
  44.80  5.36  5.36      204.       157.       361.     1.88     1.45     3.33
   0.019    0.015    0.033       0.133       0.001         0.000         0.000
Geothermal                      13
Landfill Gas                    14
  VACA  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    25.   0.
  78.60 10.48 10.48      112.        85.       197.     1.53     1.16     2.69
   0.188    0.143    0.331       0.000       0.000         0.000         0.000
Wind                            15
  VACA  WIND 00     000000 00              NONE     0.00  0.00 71.00    14.   0.
  26.40  0.00  0.00       20.        11.        31.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  VACA  OTHER00     000000 00              NONE     0.00  0.00 71.00   140.   0.
 103.60  0.00  0.00      617.       487.      1104.     6.79     5.35    12.14
   0.000    0.000    0.000       0.000       0.431         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
  VACA  PUMPS00     000000 00              NONE     0.00  0.00 71.00  4295.   0.
   6.50  0.00  0.00     1816.      1410.      3226.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                    21
Cgn_Coal                        22
  VACA  CGCOU0631102050710 01              BA2: 5.2 0.35  1.10  5.17    35.   0.
  11.70  1.54  1.54      142.       114.       256.     1.14     0.92     2.05
   0.200    0.161    0.361       1.129       0.005         0.191         0.052
```

```
  VACANCCGCOU0611102050310 01                BA2: 5.2 0.39  1.10  0.57    65.   0.
  17.40  1.54  1.54      263.       212.       475.     2.34     1.89     4.23
   0.451    0.364    0.814       2.327       0.001         0.394         0.107
  VACANCCGCOU0611102050710 01                BA2: 5.2 0.39  1.10  5.17    21.   0.
  28.70  1.54  1.54       85.        69.       154.     0.78     0.63     1.41
   0.150    0.121    0.271       0.776       0.004         0.131         0.036
  VACANCCGCOU0631102050310 01                BA2: 5.2 0.39  1.10  0.57   135.   0.
  17.40  1.54  1.54      546.       441.       987.     4.86     3.92     8.79
   0.936    0.755    1.692       4.833       0.002         0.818         0.223
  VACANCCGCOU0631102050710 01                BA2: 5.2 0.39  1.10  5.17   161.   0.
  13.60  1.54  1.54      652.       526.      1178.     5.80     4.68    10.48
   1.116    0.901    2.017       5.764       0.027         0.976         0.266
  VACAVACGCOU0311092050310 01                BA2: 5.2 0.38  1.10  0.57    49.   0.
  17.40  1.54  1.54      198.       160.       358.     1.77     1.42     3.19
   0.333    0.269    0.601       1.754       0.001         0.297         0.081
  VACAVACGCOU0331092050710 01                BA2: 5.2 0.38  1.10  5.17   363.   0.
  11.70  1.54  1.54     1469.      1186.      2655.    11.93     9.63    21.57
   2.250    1.816    4.065      11.861       0.056         2.008         0.548
  VACAVACGCOU0341092050710 01                BA2: 5.2 0.38  1.10  5.17   199.   0.
  11.70  1.54  1.54      675.       418.      1093.     6.89     4.26    11.15
   1.298    0.804    2.102       6.133       0.029         1.038         0.283
  VACAVACGCOS0331092050304 01                BF2:11.1 0.38  0.30  4.44    78.   0.
  35.60  2.94  2.94      316.       255.       571.     2.81     2.27     5.08
   0.530    0.427    0.957       0.762       0.011         0.473         0.129
  VACANCCGCOD0631102050308 01                BE2:10.4 0.39  0.53  4.18    52.   0.
  23.30  2.84  3.84      210.       170.       380.     2.06     1.66     3.72
   0.396    0.207    0.603       0.981       0.008         0.346         0.094
Cgn_Gas                         23
  VACANCCGCT 0612   000000 00                GAS      0.11  0.00  0.00     2.   0.
   2.80  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACAVACGCT 0311   000000 00                GAS      0.11  0.00  0.00     7.   0.
   2.80  0.00  1.03        0.         4.         4.     0.00     0.03     0.03
   0.000    0.002    0.002       0.000       0.000         0.002         0.000
  VACAVACGCT 0312   000000 00                GAS      0.11  0.00  0.00    11.   0.
   2.80  0.00  1.03        0.         2.         2.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  VACA  CGCC 0622   000000 00                GAS      0.02  0.00  0.00  1000.   0.
  13.90  1.03  1.03      161.       515.       676.     1.21     3.86     5.07
   0.012    0.039    0.051       0.000       0.000         0.269         0.073
  VACA  CGCC 0623   000000 00                GAS      0.11  0.00  0.00   111.   0.
  13.90  0.00  1.03        0.        19.        19.     0.00     0.19     0.19
   0.000    0.010    0.010       0.000       0.000         0.010         0.003
  VACANCCGCC 0623   000000 00                GAS      0.11  0.00  0.00   162.   0.
  13.90  0.00  1.03        0.        28.        28.     0.00     0.28     0.28
   0.000    0.015    0.015       0.000       0.000         0.015         0.004
  VACAVACGCC 0322   000000 00                GAS      0.12  0.00  0.00   288.   0.
  13.90  1.03  1.03       64.       148.       213.     0.46     1.06     1.53
   0.028    0.063    0.091       0.000       0.000         0.081         0.022
  VACAVACGCC 0323   000000 00                GAS      0.12  0.00  0.00    91.   0.
  13.90  0.00  1.03        0.        16.        16.     0.00     0.16     0.16
   0.000    0.009    0.009       0.000       0.000         0.008         0.002
Cgn_Oil                         24
Cgn_Other                       25
  VACA  CGBIO00  50 000000 00                B1-: 0.6 0.02  0.08  0.57    34.   0.
  44.80  5.36  5.36      147.       114.       261.     1.26     0.97     2.23
   0.013    0.010    0.022       0.089       0.001         0.000         0.000
  VACA  CGOTH00     000000 00                NONE     0.00  0.00 71.00    10.   0.
 103.60  0.00  0.00       43.        33.        77.     0.18     0.14     0.32
   0.000    0.000    0.000       0.000       0.011         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
```

```
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
  VACA  TSXBS0641101020103 01     SCR2     BF2:11.1 0.57  0.28  3.77   270.   9.
  36.10  2.94  3.90     1121.       890.      2011.    11.07     8.79    19.86
   3.133    0.251    3.383       2.801       0.026         1.850         0.504
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-----------------------------------------------------------------------------
Year: 2005, Region: TVA      (Emissions By Plant)
--------------------------------------------------
```

NOx	SO2	MER	CO2	Carbon
Emission	Generation Emission	Emission	Trillion Emission	Emission

```
                                                                  (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                                      (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx               1
  TVA KYTSYBA0641201010105 01              BG1: 8.0 0.88  0.25  3.70  1192.   0.
  43.50  2.91  3.91     4947.      3929.      8876.    49.20    39.08    88.28
  21.526    1.700   23.226      11.035       0.107         8.221         2.242
  TVA   TSXBA0641221020105 01              BG1: 8.0 0.56  0.25  2.73  2448.   0.
  43.30  2.91  3.91    10160.      8069.     18229.    98.79    78.46   177.25
  27.909    2.236   30.145      22.157       0.167        16.506         4.502
  TVA   TSXBA0641222020105 01              BG1: 8.0 0.38  0.25  2.73   477.   0.
  43.50  2.91  3.91     1980.      1572.      3552.    19.48    15.47    34.96
   3.702    0.294    3.996       4.370       0.033         3.255         0.888
  TVA   TSXBA0641222020705 01              BG1: 8.0 0.35  0.25  4.66   467.   0.
  43.50  2.91  3.91     1938.      1539.      3477.    19.19    15.24    34.42
   3.405    0.274    3.680       4.303       0.051         3.206         0.874
  TVA MSTCOLA1641242020105 01              BF2:11.1 0.11  0.15  1.11   440.   0.
  23.60  3.91  3.91     1826.      1450.      3276.    16.43    13.05    29.49
   0.904    0.718    1.622       2.212       0.016         2.746         0.749
  TVA KYTSEBA0641201010105 01              BG1: 8.0 0.96  0.25  3.70   977.   0.
  43.30  2.91  3.91     4055.      3220.      7275.    40.83    32.43    73.27
  19.601    1.557   21.157       9.158       0.089         6.823         1.861
Scrubbed Coal                   2
  TVA   TSWBS0642202030303 01              BG1: 8.0 0.45  0.60  0.40   124.   0.
  23.10  2.94  2.94      515.       409.       923.     5.48     4.35     9.83
   1.222    0.971    2.192       2.950       0.002         0.916         0.250
Unscrubbed Coal_NOx             3
  TVA   TSEBC0641221010101 01              BB2: 4.1 0.88  1.00  2.62   744.   0.
  32.50  1.51  2.51     3088.      2452.      5540.    29.85    23.70    53.55
  13.177    1.043   14.220      26.775       0.070         4.987         1.360
  TVA   TSCBC0641212020101 01              BA2: 5.2 0.37  1.10  3.31   879.   0.
  32.50  1.51  2.51        0.      2897.      2897.     0.00    25.79    25.79
   0.000    0.477    0.477      14.187       0.043         2.402         0.655
  TVA   TSCBC0641212020101 01              BD1: 5.1 0.37  1.50  3.24   879.   0.
  32.50  1.51  2.51     3648.         0.      3648.    32.48     0.00    32.48
   6.008    0.000    6.008      24.358       0.053         3.024         0.825
  TVA   TSCBC0641212020201 01              BD1: 5.1 0.36  1.50  4.56  1434.   0.
  32.60  1.51  2.51     5951.      4727.     10678.    58.15    46.18   104.33
  10.409    0.831   11.240      78.251       0.238         9.716         2.650
Unscrubbed Coal                 4
  TVA   TSABU0641202020310 01              BB2: 4.1 0.39  1.00  0.45  1206.   0.
  32.00  1.54  1.54     5005.      3975.      8980.    50.44    40.06    90.49
   9.860    7.831   17.692      45.247       0.020         8.427         2.298
  TVA   TSBBU0641212020110 01              BA2: 5.2 0.39  1.10  3.31   976.   0.
  32.00  1.54  1.54        0.      3217.      3217.     0.00    30.70    30.70
   0.000    6.049    6.049      16.887       0.051         2.859         0.780
  TVA   TSBBU0641212020110 01              BD1: 5.1 0.39  1.50  3.24   976.   0.
  32.00  1.54  1.54     4051.         0.      4051.    38.66     0.00    38.66
   7.616    0.000    7.616      28.994       0.063         3.600         0.982
  TVA   TSCBU0641212020210 01              BA2: 5.2 0.39  1.10  4.65   704.   0.
  32.00  1.54  1.54        0.      2320.      2320.     0.00    22.08    22.08
   0.000    4.305    4.305      12.142       0.051         2.056         0.561
  TVA   TSCBU0641212020210 01              BD1: 5.1 0.39  1.50  4.56   704.   0.
  32.00  1.54  1.54     2922.         0.      2922.    27.80     0.00    27.80
   5.420    0.000    5.420      20.848       0.063         2.589         0.706
  TVA   TSDBU0641222020110 01              BB2: 4.1 0.46  1.00  2.62   564.   0.
  32.00  1.54  1.54     2341.      1195.      3536.    24.52    12.52    37.04
   5.689    2.904    8.593      18.520       0.049         3.449         0.941
  TVA   TSDBU0642222020210 01              BB2: 4.1 0.31  1.00  3.69   642.   0.
  32.00  1.54  1.54     2232.       948.      3180.    25.50    10.83    36.33
   3.953    1.679    5.632      18.167       0.067         3.384         0.923
  TVA   TSGBU0641222020110 01              BB2: 4.1 0.37  1.00  2.62   222.   0.
```

```
  32.00  1.54  1.54      921.       470.      1392.     9.75     4.98    14.73
   1.819    0.929    2.747       7.366       0.019         1.372         0.374
  TVA   TSGBU0642222020110 01              BB2: 4.1 0.38  1.00  2.62   444.   0.
  32.00  1.54  1.54     1843.       941.      2783.    20.05    10.23    30.28
   3.769    1.924    5.693      15.142       0.040         2.820         0.769
  TVA   TSLSU0641222020110 01              SB2: 6.5 0.43  1.00  6.29   712.   0.
  32.00  1.54  1.54     2549.      1051.      3600.    26.07    10.75    36.82
   5.553    2.290    7.843      18.411       0.116         3.552         0.969
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1244.   0.
 109.50  0.32  0.32     5529.      4563.     10092.    57.67    47.60   105.26
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1244.   0.
  59.50  0.32  0.32     6153.      4353.     10506.    64.17    45.40   109.58
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1140.   0.
  83.70  0.37  0.37     5634.      3981.      9615.    57.31    40.49    97.80
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1128.   0.
  99.20  0.57  0.57     5692.      3657.      9349.    61.13    39.28   100.41
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1147.   0.
  83.70  0.37  0.37     4731.      3989.      8720.    48.13    40.57    88.70
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  TVA   HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  3934.   0.
  15.40  0.00  0.00    11469.      6255.     17724.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  TVA   CC   0622   000000 00              GAS      0.02  0.00  0.00    79.   0.
  13.90  1.03  1.03       53.        41.        94.     0.40     0.31     0.70
   0.004    0.003    0.007       0.000       0.000         0.037         0.010
  TVA MSCC   1622   000000 00              GAS      0.02  0.00  0.00  2500.   0.
  13.90  1.03  1.03     1156.      2779.      3935.     8.67    20.84    29.52
   0.087    0.208    0.295       0.000       0.000         1.566         0.427
IGCC                           10
Turbine                        11
Biomass                        12
  TVA   BIOMS00  50 000000 00              B1-: 0.6 0.02  0.08  0.57     1.   0.
  44.80  5.36  5.36        4.         3.         8.     0.04     0.03     0.07
   0.000    0.000    0.001       0.003       0.000         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  TVA   LFGAS00     000000 00              WASTE    0.25  0.00  0.00     2.   0.
  78.60 10.48 10.48        9.         7.        16.     0.12     0.09     0.22
   0.015    0.011    0.026       0.000       0.000         0.000         0.000
Wind                           15
  TVA   WIND 00     000000 00              NONE     0.00  0.00 71.00     2.   0.
  26.40  0.00  0.00        2.         1.         3.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  TVA   OTHER00     000000 00              NONE     0.00  0.00  0.00    12.   0.
 103.60  0.00  0.00       53.        42.        95.     0.58     0.46     1.04
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
  TVA   PUMPS00     000000 00              NONE     0.00  0.00 71.00  1532.   0.
   6.50  0.00  0.00        0.       385.       385.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
```

```
Cgn_Gas                        23
  TVA   CGCC 0622   000000 00              GAS      0.02  0.00  0.00  1290.   0.
  13.90  1.03  1.03      289.       664.       953.     2.16     4.98     7.15
   0.022    0.050    0.071       0.000       0.000         0.379         0.103
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
  TVA   TSLSC0641222020101 01     LO01     BG1: 8.0 0.45  0.25  2.73   457.  25.
  41.90  2.92  3.92     1897.      1507.      3404.    19.20    15.25    34.46
   4.302    0.343    4.645       4.307       0.032         3.209         0.875
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Year: 2005, Region: SOU      (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  SOU   TSXBS0641222020203 01              BG1: 8.0 0.34  0.85  4.66   472.   0.
  35.60  2.94  2.94     1959.      1556.      3515.    20.56    16.33    36.89
   3.547    2.817    6.363      15.770       0.086         3.435         0.937
  SOU   TSXBS0642112020103 01              BF2:11.1 0.34  0.12  3.77   102.   0.
  43.00  2.94  2.94      423.       336.       760.     4.90     3.90     8.80
   0.839    0.666    1.505       0.541       0.017         0.820         0.224
  SOU MSTSXBS1641291020203 01              BD1: 5.1 0.50  0.07  2.94   200.   0.
  35.60  2.94  2.94      830.       659.      1489.     8.72     6.92    15.64
   2.196    1.744    3.941       0.539       0.023         1.456         0.397
  SOU MSTSXBS1641292020203 01              BD1: 5.1 0.42  0.07  2.94   200.   0.
  35.60  2.94  2.94      830.       659.      1489.     8.72     6.92    15.64
   1.843    1.464    3.307       0.539       0.023         1.456         0.397
Unscrubbed Coal_NOx            3
  SOU ALTSABC0641232020101 01              BA1: 3.7 0.33  1.10  2.36  1341.   0.
  12.20  1.51  2.51     5565.      4420.      9985.    52.53    41.72    94.24
   8.719    0.688    9.408      51.834       0.111         8.776         2.393
  SOU   TSFBC0641112020101 01              BA2: 5.2 0.45  1.10  3.31   505.   0.
  27.00  1.51  2.51     2096.      1665.      3760.    21.03    16.70    37.73
   4.690    0.376    5.065      20.752       0.062         3.514         0.958
  SOU   TSHBC0641112020101 01              BA2: 5.2 0.43  1.10  3.31  4948.   0.
  26.30  1.51  2.51        0.     14995.     14995.     0.00   141.37   141.37
   0.000    3.039    3.039      77.754       0.234        13.165         3.590
  SOU   TSHBC0641112020101 01              BD1: 5.1 0.43  1.50  3.24  4948.   0.
  26.30  1.51  2.51    20535.      1314.     21849.   193.60    12.39   206.00
  41.818    0.266   42.085     154.497       0.334        19.183         5.232
Unscrubbed Coal                4
  SOU   TSABU0641112020110 01              BA2: 5.2 0.42  1.10  3.31  1721.   0.
  28.80  1.54  1.54        0.      5104.      5104.     0.00    48.71    48.71
   0.000   10.277   10.277      26.788       0.081         4.536         1.237
  SOU   TSABU0641112020110 01              BD1: 5.1 0.42  1.50  3.24  1721.   0.
  28.80  1.54  1.54     7142.         0.      7142.    68.16     0.00    68.16
  14.382    0.000   14.382      51.120       0.111         6.347         1.731
  SOU ALTSABU0641232020210 01              BA1: 3.7 0.33  1.10  3.32   669.   0.
  17.40  1.54  1.54     2776.      2205.      4982.    26.20    20.81    47.02
   4.363    3.465    7.828      25.859       0.078         4.378         1.194
  SOU MSTSABU1641242020110 01              BB1: 3.4 0.29  1.00  2.18   536.   0.
  21.40  1.54  1.54     2224.      1767.      3991.    22.45    17.83    40.28
   3.300    2.621    5.920      20.138       0.044         3.751         1.023
  SOU MSTSABU1641242020210 01              BB1: 3.4 0.33  1.00  3.07   545.   0.
  17.40  1.54  1.54     2262.      1796.      4058.    22.41    17.80    40.21
   3.653    2.901    6.555      20.106       0.062         3.745         1.021
  SOU   TSBBU0632112020110 01              BA2: 5.2 0.35  1.10  3.31   107.   0.
  32.00  1.54  0.00      372.         0.       372.     4.12     0.00     4.12
   0.717    0.000    0.717       2.266       0.007         0.384         0.105
  SOU   TSBBU0641112020110 01              BA2: 5.2 0.38  1.10  3.31   282.   0.
  26.20  1.54  1.54      980.        90.      1071.     9.91     0.91    10.82
```

```
   1.868    0.172    2.040       5.953       0.018         1.008         0.275
  SOU   TSBBU0641112020110 01              BD1: 5.1 0.38  1.50  3.24   282.   0.
  26.20  1.54  1.54        0.       326.       326.     0.00     3.29     3.29
   0.000    0.621    0.621       2.471       0.005         0.307         0.084
  SOU   TSBBU0641242020110 01              BB1: 3.4 0.38  1.00  2.18  1103.   0.
  26.40  1.54  1.54     4578.      3636.      8213.    43.18    34.29    77.47
   8.160    6.481   14.641      38.734       0.085         7.214         1.967
  SOU   TSBBU0641242020210 01              BB1: 3.4 0.38  1.00  3.07   534.   0.
  32.00  1.54  1.54     2216.      1760.      3976.    21.67    17.21    38.88
   4.150    3.296    7.446      19.440       0.060         3.621         0.987
  SOU MSTSBBU1641241020110 01              BB1: 3.4 0.58  1.00  2.18   512.   0.
  26.40  1.54  1.54     2125.      1688.      3812.    20.95    16.64    37.60
   6.056    4.809   10.865      18.798       0.041         3.501         0.955
  SOU MSTSBBU1641242020110 01              BB1: 3.4 0.45  1.00  2.18   262.   0.
  26.40  1.54  1.54     1087.       864.      1951.    10.77     8.55    19.32
   2.423    1.924    4.347       9.660       0.021         1.799         0.491
  SOU   TSCBU0641232020210 01              BA1: 3.7 0.42  1.10  3.32  1904.   0.
  29.40  1.54  1.54        0.      5060.      5060.     0.00    47.37    47.37
   0.000   10.020   10.020      26.056       0.079         4.412         1.203
  SOU   TSCBU0641232020210 01              BD1: 5.1 0.42  1.50  4.56  1904.   0.
  29.40  1.54  1.54     7902.      1216.      9118.    73.99    11.39    85.37
  15.648    2.408   18.056      64.029       0.195         7.950         2.168
  SOU ALTSEBU0632232020110 01              BD1: 5.1 0.36  1.50  3.24   135.   0.
  32.00  1.54  1.54      469.        36.       505.     5.52     0.42     5.95
   0.997    0.076    1.073       4.459       0.010         0.554         0.151
  SOU ALTSEBU0632232020110 01              BA1: 3.7 0.36  1.10  2.36   135.   0.
  32.00  1.54  1.54        0.       129.       129.     0.00     1.52     1.52
   0.000    0.275    0.275       0.837       0.002         0.142         0.039
  SOU ALTSEBU0641232020210 01              BD1: 5.1 0.36  1.50  4.56   857.   0.
  32.00  1.54  1.54     3557.      2825.      6381.    34.20    27.17    61.37
   6.106    4.849   10.955      46.028       0.140         5.715         1.559
  SOU ALTSEBU0642232020110 01              BD1: 5.1 0.40  1.50  3.24   224.   0.
  32.00  1.54  1.54      453.        72.       525.     5.02     0.80     5.81
   0.991    0.157    1.148       4.359       0.009         0.541         0.148
  SOU ALTSEBU0642232020110 01              BA1: 3.7 0.40  1.10  2.36   224.   0.
  32.00  1.54  1.54      326.       259.       585.     3.61     2.87     6.48
   0.713    0.567    1.280       3.564       0.008         0.603         0.165
  SOU   TSESU0641112020110 01              SB2: 6.5 0.28  1.00  6.29  1687.   0.
  14.60  1.54  1.54     5865.      5561.     11425.    58.32    55.30   113.62
   8.224    7.797   16.021      56.812       0.357        10.962         2.990
  SOU   TSFBU0641112020110 01              BA2: 5.2 0.36  1.10  3.31  1674.   0.
  29.70  1.54  1.54     6176.      4622.     10798.    61.91    46.34   108.25
  11.145    8.340   19.485      59.537       0.179        10.080         2.749
  SOU   TSFBU0642112020110 01              BA2: 5.2 0.37  1.10  3.31   320.   0.
  32.00  1.54  0.00     1112.         0.      1112.    12.59     0.00    12.59
   2.349    0.000    2.349       6.927       0.021         1.173         0.320
  SOU   TSHBU0632222020210 01              BB2: 4.1 0.35  1.00  3.69    80.   0.
  26.40  1.54  1.54      278.       118.       396.     3.16     1.34     4.50
   0.550    0.233    0.783       2.251       0.008         0.419         0.114
Oil/Gas Steam                    5
Oil/Gas Steam_Nox                6
Nuclear                          7
  SOU   NUKE 00    7000000 00              NUC      0.00  0.00  0.00   865.   0.
 149.60  0.69  0.69     4060.      2963.      7024.    44.23    32.28    76.51
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1148.   0.
  78.50  0.38  0.38     5698.      3929.      9627.    61.95    42.72   104.67
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1149.   0.
  78.50  0.38  0.38     5543.      4215.      9758.    60.27    45.83   106.09
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00              NUC      0.00  0.00  0.00   851.   0.
 100.80  0.65  0.65     3124.      2831.      5956.    34.37    31.14    65.51
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00              NUC      0.00  0.00  0.00   860.   0.
```

```
 100.80  0.65  0.65     3623.      3155.      6777.    39.85    34.70    74.55
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00              NUC      0.00  0.00  0.00   879.   0.
  99.60  0.69  0.69     3933.      2979.      6912.    43.19    32.72    75.91
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  SOU   HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  3305.   0.
  14.90  0.00  0.00     6138.      2706.      8844.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  SOU   CC   0612   000000 00              GAS      0.02  0.00  0.00    27.   0.
  13.90  1.03  1.03       91.        70.       160.     0.68     0.52     1.20
   0.007    0.005    0.012       0.000       0.000         0.064         0.017
  SOU   CC   0622   000000 00              GAS      0.02  0.00  0.00 10500.   0.
  13.90  1.03  1.03     9006.     17531.     26537.    67.63   131.66   199.29
   0.710    1.382    2.093       0.000       0.000        10.576         2.884
  SOU FLCC   1522   000000 00              GAS      0.02  0.00  0.00   500.   0.
  13.90  1.03  1.03     1681.      1289.      2970.    12.61     9.67    22.27
   0.126    0.097    0.223       0.000       0.000         1.182         0.322
  SOU MSCC   1622   000000 00              GAS      0.02  0.00  0.00  1000.   0.
  13.90  1.03  1.03     3361.      2578.      5940.    25.21    19.34    44.55
   0.252    0.193    0.445       0.000       0.000         2.364         0.645
IGCC                           10
Turbine                        11
  SOU   CT   0611   000000 00              GAS      0.10  0.00  0.00     3.   0.
   2.80  0.00  1.03        0.         2.         2.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
Biomass                        12
Geothermal                     13
Landfill Gas                   14
  SOU   LFGAS00     000000 00              WASTE    0.25  0.00  0.00     9.   0.
  78.60 10.48 10.48       40.        31.        71.     0.55     0.42     0.97
   0.068    0.052    0.119       0.000       0.000         0.000         0.000
Wind                           15
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
Cgn_Coal                       22
  SOU   CGCOU0611112050710 01              BA2: 5.2 0.40  1.10  5.17     1.   0.
  14.60  1.54  1.54        4.         3.         7.     0.04     0.03     0.07
   0.007    0.006    0.013       0.036       0.000         0.006         0.002
Cgn_Gas                        23
  SOU   CGCT 0612   000000 00              GAS      0.10  0.00  0.00     4.   0.
   8.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU MSCGCT 1622   000000 00              GAS      0.05  0.00  0.00    70.   0.
   2.80  0.00  1.03        0.        12.        12.     0.00     0.12     0.12
   0.000    0.003    0.003       0.000       0.000         0.006         0.002
  SOU   CGCC 0612   000000 00              GAS      0.10  0.00  0.00     5.   0.
  13.90  0.00  1.03        0.         3.         3.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  SOU   CGCC 0622   000000 00              GAS      0.04  0.00  0.00  1604.   0.
  13.90  1.03  1.03      359.       826.      1185.     2.75     6.33     9.08
   0.048    0.111    0.159       0.000       0.000         0.482         0.131
  SOU FLCGCC 1522   000000 00              GAS      0.02  0.00  0.00   240.   0.
  13.90  1.03  1.03      807.       619.      1426.     6.05     4.64    10.69
   0.061    0.046    0.107       0.000       0.000         0.567         0.155
Cgn_Oil                        24
Cgn_Other                      25
  SOU   CGBIO00  50 000000 00              B1-: 0.6 0.02  0.08  0.57     5.   0.
  44.80  5.36  5.36       22.        17.        38.     0.19     0.14     0.33
   0.002    0.001    0.003       0.013       0.000         0.000         0.000
```

```
NonCG IPP_Coal                26
NonCG IPP_Gas                 27
NonCG IPP_Other               28
Blr_Coal                      29
Blr_Gas                       30
Blr_Oil                       31
Blr_Other                     32
SteamOnly Cogen               33
Rep.Coal-CC                   34
Rep.O/G-CC                    35
Rep.Coal-IGCC                 36
Ret.Scrubber                  37
Ret.ExistSCR & Scrub          38
  SOU   TSKBC0641232020101 01     LO01     BF3:18.7 0.40  0.15  6.35   722.  20.
  34.78  2.88  3.88     2994.      2378.      5373.    29.21    23.20    52.41
   5.885    0.464    6.349       3.930       0.114         4.880         1.331
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
  SOU ALTSABU0641231020210 01     SCR2     BA1: 3.7 0.63  1.10  3.32   670.   7.
  17.80  1.54  2.40     2781.      2208.      4989.    26.24    20.84    47.09
   8.254    0.657    8.910      25.898       0.078         4.385         1.196
  SOU   TSESU0641111020210 01     SCR2     SB2: 6.5 0.56  1.00  6.09   747.   6.
  17.70  1.54  2.38     3102.      2464.      5566.    29.91    23.76    53.67
   8.316    0.665    8.982      26.837       0.160         5.178         1.412
Ret.ExistScrub & SCR          41
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  SOU   TSESU0641111020210 01     SO01     BF2:11.1 0.56  0.15  6.43    84.  25.
  24.97  2.92  3.76      348.       276.       624.     3.42     2.72     6.14
   0.952    0.076    1.028       0.461       0.013         0.572         0.156
  SOU   TSESU0641112020210 01     RO01     BF2:11.1 0.50  0.15  6.43   815.  25.
  24.97  2.93  3.77     3380.      2685.      6065.    33.64    26.72    60.36
   8.411    0.668    9.079       4.527       0.123         5.621         1.533
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
```

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation reported in BBtu

---
Year: 2005, Region: ENTG (Emissions By Plant)

NOx SO2 MER CO2 Carbon

Generation Trillion
Emission Emission Emission Emission Emission
(lb/MBtu)(lb/TBtu)(MW) $
/KWyr VOM Mill/KWh (GWh) (Btu)
(1000 Tons) (1000 Tons) (Tons) (Mil Tonnes)(Mil Tonnes)
Unit Fuel NOx SO2 MERCURY Cap. Cap
. FO&M WINT. SUMM. WINTER SUMMER Total WINTER SUMMER Total
WINTER SUMMER Total Total Total Total Total Total
Scrubbed Coal_NOx 1
Scrubbed Coal 2
ENTGMOTSISS0541272020103 01 SB2: 6.5 0.29 0.22 5.44 670. 0.
35.60 2.94 2.94 2781. 2208. 4989. 27.95 22.19 50.14
4.038 3.207 7.245 5.616 0.136 4.837 1.319
Unscrubbed Coal_NOx 3
ENTGMOTSEBC0541251010101 01 BB2: 4.1 0.73 0.47 2.62 1160. 0.
27.00 1.51 2.51 4814. 3824. 8638. 48.38 38.43 86.81
17.684 1.403 19.086 20.400 0.114 8.084 2.205
Unscrubbed Coal 4
ENTG TCOLU1041292050210 01 BB1: 3.4 0.28 1.00 3.41 550. 0.
17.40 1.54 1.54 2283. 1813. 4095. 23.74 18.85 42.59
3.312 2.630 5.942 21.296 0.073 3.966 1.082
ENTG TSASU1041292020110 01 SB2: 6.5 0.31 0.73 6.29 4252. 0.
17.40 1.54 1.54 17555. 14015. 31570. 179.13 143.01 322.14
28.034 22.381 50.415 118.226 1.012 31.080 8.476
ENTG TSASU1042292020110 01 SB2: 6.5 0.37 1.00 6.29 815. 0.
17.40 1.54 1.54 2833. 2686. 5520. 30.44 28.86 59.30
5.646 5.353 11.000 29.649 0.186 5.721 1.560
ENTGMOTSISU0541271010110 01 SB2: 6.5 0.57 0.47 6.29 450. 0.
28.60 1.54 1.54 1868. 1483. 3351. 18.84 14.96 33.81
5.398 4.287 9.686 7.945 0.106 3.262 0.890
Oil/Gas Steam 5
Oil/Gas Steam_Nox 6
Nuclear 7
ENTG NUKE 00 8000000 00 NUC 0.00 0.00 0.00 1141. 0.
131.60 0.67 0.67 5532. 3951. 9483. 58.30 41.64 99.94
0.000 0.000 0.000 0.000 0.000 0.000 0.000
ENTG NUKE 00 7000000 00 NUC 0.00 0.00 0.00 1231. 0.
104.00 0.53 0.53 6181. 4258. 10439. 68.93 47.48 116.41
0.000 0.000 0.000 0.000 0.000 0.000 0.000
ENTG NUKE 00 7000000 00 NUC 0.00 0.00 0.00 885. 0.
166.00 0.56 0.56 3889. 3172. 7061. 43.09 35.14 78.23
0.000 0.000 0.000 0.000 0.000 0.000 0.000
ENTG NUKE 00 7000000 00 NUC 0.00 0.00 0.00 980. 0.
103.40 0.72 0.72 4327. 3397. 7724. 49.39 38.77 88.16
0.000 0.000 0.000 0.000 0.000 0.000 0.000
ENTG NUKE 00 7000000 00 NUC 0.00 0.00 0.00 936. 0.
116.00 0.56 0.56 3740. 2805. 6545. 42.81 32.10 74.91
0.000 0.000 0.000 0.000 0.000 0.000 0.000
Hydro 8
ENTG HYDRO00 000000 00 HYDRO 0.00 0.00 0.00 336. 0.

```
  14.20  0.00  0.00      646.       474.      1120.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  ENTG  CC   1022   000000 00              GAS      0.02  0.00  0.00  6669.   0.
  13.90  1.03  1.03     4830.      6906.     11736.    36.23    51.79    88.02
   0.362    0.518    0.880       0.000       0.000         4.671         1.274
  ENTGMSCC   1622   000000 00              GAS      0.02  0.00  0.00  3835.   0.
  13.90  0.00  1.03        0.      5931.      5931.     0.00    44.49    44.49
   0.000    0.445    0.445       0.000       0.000         2.361         0.644
  ENTGMOCC   0522   000000 00              GAS      0.02  0.00  0.00   225.   0.
  13.90  0.00  1.03        0.        39.        39.     0.00     0.29     0.29
   0.000    0.003    0.003       0.000       0.000         0.015         0.004
  ENTGTXCC   2322   000000 00              GAS      0.02  0.00  0.00   911.   0.
  13.90  0.00  1.03        0.       156.       156.     0.00     1.17     1.17
   0.000    0.012    0.012       0.000       0.000         0.062         0.017
IGCC                          10
Turbine                       11
Biomass                       12
  ENTG  BIOMS00  51 000000 00              B1-: 0.6 0.02  0.08  0.57    10.   0.
  44.80  5.36  5.36       43.        33.        77.     0.40     0.31     0.71
   0.004    0.003    0.007       0.028       0.000         0.000         0.000
Geothermal                    13
Landfill Gas                  14
  ENTG  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     6.   0.
  78.60 10.48 10.48       27.        20.        47.     0.37     0.28     0.65
   0.045    0.034    0.079       0.000       0.000         0.000         0.000
Wind                          15
  ENTG  WIND 00     000000 00              NONE     0.00  0.00 71.00    57.   0.
  26.40  0.00  0.00       57.        32.        88.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
  ENTG  OTHER00     000000 00              NONE     0.00  0.00  0.00    31.   0.
 103.60  0.00  0.00      137.       108.       244.     1.50     1.19     2.69
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                  19
Pump Storage                  20
Int. Imports                  21
Cgn_Coal                      22
Cgn_Gas                       23
  ENTG  CGCC 1012   000000 00              GAS      0.09  0.00  0.00    52.   0.
  13.90  0.00  1.03        0.         9.         9.     0.00     0.07     0.07
   0.000    0.003    0.003       0.000       0.000         0.004         0.001
  ENTG  CGCC 1022   000000 00              GAS      0.02  0.00  0.00  1891.   0.
  13.90  0.00  1.03        0.      4763.      4763.     0.00    35.72    35.72
   0.000    0.357    0.357       0.000       0.000         1.896         0.517
  ENTGTXCGCC 1922   000000 00              GAS      0.02  0.00  0.00   353.   0.
  13.90  0.00  1.03        0.        32.        32.     0.00     0.24     0.24
   0.000    0.002    0.002       0.000       0.000         0.013         0.004
  ENTGTXCGCC 2712   000000 00              GAS      0.02  0.00  0.00    25.   0.
  13.90  0.00  1.03        0.         4.         4.     0.00     0.03     0.03
   0.000    0.000    0.000       0.000       0.000         0.002         0.000
  ENTGTXCGCC 2722   000000 00              GAS      0.02  0.00  0.00   513.   0.
  13.90  0.00  1.03        0.       402.       402.     0.00     3.01     3.01
   0.000    0.030    0.030       0.000       0.000         0.160         0.044
Cgn_Oil                       24
Cgn_Other                     25
  ENTG  CGBIO00  51 000000 00              B1-: 0.6 0.02  0.08  0.57     8.   0.
  44.80  5.36  5.36       35.        27.        61.     0.30     0.23     0.52
   0.003    0.002    0.005       0.021       0.000         0.000         0.000
  ENTG  CGFWT102    000000 00              WASTE    0.42  0.00 20.87   170.   0.
 103.60  0.00  0.00      760.       580.      1340.     4.52     3.44     7.96
   0.939    0.716    1.656       0.000       0.083         0.000         0.000
NonCG IPP_Coal                26
```

NonCG IPP_Gas	27
NonCG IPP_Other	28
Blr_Coal	29
Blr_Gas	30
Blr_Oil	31
Blr_Other	32
SteamOnly Cogen	33
Rep.Coal-CC	34
Rep.O/G-CC	35
Rep.Coal-IGCC	36
Ret.Scrubber	37
Ret.ExistSCR & Scrub	38
Ret.ExistSNCR & Scrub	39
Ret.SCR	40
Ret.ExistScrub & SCR	41
Ret.SNCR	42
Ret.ExistScrub & SNCR	43
Ret.SCR+Scrb	44
Ret.SNCR+Scrub	45
Ret.Gas Reburn	46
Ret.ExistScrub+GasR	47
Ret.GasReburn+Scrub	48
Ret.ACI	49
Ret.ExistScrub&ACI	50
Ret.ExistSCR&ACI	51
Ret.ExistSNCR&ACI	52
Ret.ACI & SCR	53
Ret.ExistScrub&ACI&SCR	54
Ret.ACI & SNCR	55
Ret.ExistScrub&ACI&SNCR	56
Ret.ACI & Srub	57
Ret.ExistSCR&ACI&Scrub	58
Ret.ExistSNCR&ACI&Scrub	59
Ret.ExistSNCR&ExistScrub&ACI	60
Ret.ExistSCR&ExistScrub&ACI	61
Ret.ExistNOx&ExistScrub&ACI	62
Ret.SCR & Scrub & ACI	63
Ret.SNCR & Scrub & ACI	64
Ret.O/G SCR	65
Ret.O/G SNCR	66
Ret.Nuclear (age 30+10 yrs)	67
Ret.Nuclear (age 40+20 yrs)	68
Ret. Biomass Cofiring	69
CT Early Retirement	70
CC Early Retirement	71
O/G Early Retirement	72
Coal Early Retirement	73
Nuke Early Retirement	74

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation reported in BBtu

---

Year: 2005, Region: SPPN (Emissions By Plant)

	NOx	SO2	MER	CO2	Carbon
		Generation		Trillion	

```
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total          Total
Scrubbed Coal_NOx                 1
  SPPNMOTCOLA0541252020105 01                BG1: 8.0 0.11  0.25  2.73   540.   0.
  23.60  2.91  3.91     2241.      1780.      4021.    20.17    16.02    36.19
   1.109    0.088    1.197       4.524       0.034         3.370         0.919
  SPPNMOTSCSA0541282020306 01                SD2: 6.7 0.30  0.14  5.03   550.   0.
  43.30  2.91  3.91     2283.      1813.      4095.    23.55    18.71    42.26
   3.533    0.281    3.813       2.958       0.106         4.077         1.112
Scrubbed Coal                     2
  SPPNMOTSUBS0541272020103 01                BG1: 8.0 0.30  0.80  2.73   178.   0.
  37.70  2.94  2.94      619.       491.      1110.     6.44     5.11    11.55
   0.965    0.767    1.732       4.590       0.016         1.075         0.293
  SPPN  TSYBS1741281010703 01                BD1: 5.1 0.86  0.09  2.28   682.   0.
  42.70  2.94  2.94     2371.      2248.      4619.    25.02    23.72    48.74
  10.758   10.200   20.958       2.084       0.056         4.539         1.238
  SPPN  TSYBS1741282020703 01                BD1: 5.1 0.40  0.12  2.94   370.   0.
  42.70  2.94  2.94     1536.      1220.      2755.    15.72    12.49    28.21
   3.145    2.498    5.642       1.756       0.041         2.627         0.717
  SPPN  TSYBS1742282020703 01                BD1: 5.1 0.40  0.07  2.94   113.   0.
  43.00  2.94  2.94      393.       312.       705.     4.51     3.58     8.09
   0.902    0.716    1.618       0.279       0.012         0.754         0.206
  SPPN  TSYSS1741282020304 01                SD2: 6.7 0.28  0.11  5.03   331.   0.
  35.60  2.94  2.94     1374.      1091.      2465.    14.18    11.26    25.44
   2.013    1.599    3.612       1.424       0.064         2.454         0.669
  SPPN  TSYSS1742282020103 01                SD2: 6.7 0.40  0.19  5.63  2136.   0.
  35.60  2.94  2.94     8865.      7041.     15905.    97.18    77.19   174.37
  19.437   15.437   34.874      16.600       0.491        16.823         4.588
  SPPNMOTSBSS0542282020103 01                SB2: 6.5 0.30  0.40  5.44   308.   0.
  43.00  2.94  2.94     1071.       850.      1921.    12.00     9.53    21.54
   1.801    1.430    3.231       4.329       0.059         2.078         0.567
  SPPNMOTSDSS0541282020103 01                SB2: 6.5 0.28  0.30  5.44   670.   0.
  35.60  2.94  2.94     2781.      2208.      4989.    27.04    21.48    48.52
   3.746    2.975    6.720       7.181       0.132         4.681         1.277
  SPPN  TSESS1741282020103 01                SB2: 6.5 0.50  0.34  5.44   668.   0.
  37.70  2.94  2.94     2772.      2202.      4974.    29.01    23.04    52.04
   7.252    5.759   13.011       8.926       0.142         5.021         1.369
Unscrubbed Coal_NOx               3
Unscrubbed Coal                   4
  SPPN  TCOLU1731281020310 01                BB1: 3.4 0.84  0.78  0.38    37.   0.
  32.00  1.54  1.54       54.       122.       176.     0.56     1.27     1.83
   0.235    0.533    0.768       0.717       0.000         0.170         0.046
  SPPN  TCOLU1731281020310 01                BB2: 4.1 0.84  0.78  0.45    37.   0.
  32.00  1.54  1.54       75.         0.        75.     0.78     0.00     0.78
   0.327    0.000    0.327       0.305       0.000         0.072         0.020
  SPPN  TCOLU1731282020110 01                BB1: 3.4 0.46  0.78  2.18    38.   0.
  32.00  1.54  1.54       55.         0.        55.     0.58     0.00     0.58
   0.132    0.000    0.132       0.225       0.001         0.054         0.015
  SPPN  TCOLU1731282020110 01                BB2: 4.1 0.46  0.78  2.62    38.   0.
  32.00  1.54  1.54       77.       125.       202.     0.80     1.30     2.10
   0.184    0.300    0.483       0.824       0.003         0.196         0.053
  SPPNMOTCOLU0511252050710 01                SD2: 6.7 0.48  1.40  6.70    43.   0.
  32.00  1.54  1.54      178.       142.       320.     1.86     1.47     3.33
   0.444    0.352    0.796       2.331       0.011         0.321         0.088
  SPPNMOTCOLU0511272050710 01                SD2: 6.7 0.48  1.40  6.70     8.   0.
  32.00  1.54  1.54       33.        26.        60.     0.35     0.27     0.62
   0.083    0.066    0.148       0.434       0.002         0.060         0.016
  SPPN  TOLBU1732282020110 01                BB1: 3.4 0.40  1.00  2.18   144.   0.
  32.00  1.54  1.54      210.       231.       441.     2.49     2.74     5.23
   0.498    0.549    1.047       2.617       0.006         0.487         0.133
```

```
  SPPN  TOLBU1732282020110 01                BB2: 4.1 0.40  1.00  2.62   144.   0.
  32.00  1.54  1.54       58.       166.       225.     0.69     1.98     2.67
   0.138    0.395    0.533       1.334       0.003         0.248         0.068
  SPPN  TOLBU1742282020110 01                BB1: 3.4 0.40  1.00  2.18   148.   0.
  32.00  1.54  1.54      215.       171.       386.     2.33     1.85     4.18
   0.466    0.370    0.836       2.090       0.005         0.389         0.106
  SPPN  TOLBU1742282020110 01                BB2: 4.1 0.40  1.00  2.62   148.   0.
  32.00  1.54  1.54      179.       238.       417.     1.94     2.57     4.51
   0.388    0.514    0.902       2.255       0.006         0.420         0.115
  SPPNMOTOLBU0511281020110 01                SD2: 6.7 0.63  1.40  6.50    84.   0.
  32.00  1.54  1.54      349.       277.       625.     3.63     2.88     6.51
   1.142    0.907    2.049       4.554       0.021         0.628         0.171
  SPPNMOTOLBU0531281010110 01                SB2: 6.5 0.69  1.00  6.29    53.   0.
  32.00  1.54  1.54      184.       112.       297.     1.95     1.19     3.14
   0.671    0.409    1.080       1.572       0.010         0.303         0.083
  SPPNMOTOLBU0531281020110 01                SB2: 6.5 0.60  1.00  6.29    96.   0.
  32.00  1.54  1.54      398.       203.       602.     4.14     2.12     6.26
   1.249    0.638    1.887       3.129       0.020         0.604         0.165
  SPPNMOTOLBU0531282020110 01                SB2: 6.5 0.42  1.00  6.29    51.   0.
  32.00  1.54  1.54      212.       141.       352.     2.20     1.46     3.67
   0.458    0.305    0.762       1.833       0.012         0.354         0.096
  SPPNMOTOLSU0542281010110 01                SB2: 6.5 0.57  1.00  6.29   211.   0.
  26.40  1.54  1.54      734.       447.      1181.     8.29     5.05    13.34
   2.371    1.445    3.815       6.670       0.042         1.287         0.351
  SPPNMOTSBSU0542282020110 01                SB2: 6.5 0.30  0.48  6.29   161.   0.
  32.00  1.54  1.54      668.       531.      1199.     7.14     5.67    12.82
   1.072    0.851    1.923       3.102       0.040         1.237         0.337
  SPPN  TSCBU1731282010310 01                BB1: 3.4 0.85  0.70  0.38    55.   0.
  32.00  1.54  1.54      228.         0.       228.     2.33     0.00     2.33
   0.997    0.000    0.997       0.821       0.000         0.217         0.059
  SPPN  TSCBU1731282010310 01                BB2: 4.1 0.85  0.70  0.45    55.   0.
  32.00  1.54  1.54        0.       181.       181.     0.00     1.85     1.85
   0.000    0.792    0.792       0.652       0.000         0.173         0.047
  SPPN  TSCBU1732281010110 01                SB2: 6.5 1.01  1.00  6.29    73.   0.
  32.00  1.54  1.54      254.       241.       494.     2.75     2.61     5.37
   1.391    1.319    2.710       2.683       0.017         0.518         0.141
  SPPN  TSCBU1732282020110 01                SB2: 6.5 0.40  1.00  6.29    54.   0.
  32.00  1.54  1.54      100.       149.       250.     1.26     1.86     3.12
   0.251    0.373    0.624       1.559       0.010         0.301         0.082
  SPPN  TSESU1741282020110 01                SB2: 6.5 0.46  0.78  6.29   235.   0.
  17.40  1.54  1.54      975.       775.      1750.    10.11     8.03    18.15
   2.326    1.848    4.174       7.069       0.057         1.751         0.478
  SPPN  TSFBU1742282020110 01                SB2: 6.5 0.50  1.00  6.29   135.   0.
  26.40  1.54  1.54      469.       379.       848.     5.23     4.23     9.46
   1.308    1.057    2.365       4.730       0.030         0.913         0.249
  SPPNMOTSGBU0511271020710 01                BG1: 8.0 0.95  5.00  8.04     6.   0.
  32.00  1.54  1.54       25.        20.        45.     0.26     0.21     0.46
   0.124    0.098    0.222       1.162       0.002         0.043         0.012
  SPPNMOTSJBU0541281010110 01                SB2: 6.5 0.69  1.00  6.29   390.   0.
  26.40  1.54  1.54     1619.      1077.      2695.    15.70    10.45    26.15
   5.393    3.588    8.981      13.073       0.082         2.522         0.688
  SPPNMOTSLBU0531281020110 01                SB2: 6.5 0.53  1.00  6.29    97.   0.
  26.40  1.54  1.54      403.       206.       608.     4.19     2.14     6.32
   1.109    0.566    1.676       3.162       0.020         0.610         0.166
  SPPNMOTSUBU0541272020110 01                BB2: 4.1 0.30  0.12  2.62   222.   0.
  17.40  1.54  1.54      921.       613.      1534.     9.72     6.47    16.19
   1.473    0.980    2.452       1.004       0.021         1.507         0.411
Oil/Gas Steam                    5
Oil/Gas Steam_Nox                6
Nuclear                          7
  SPPN  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1182.   0.
  92.90  0.56  0.56     5668.      4084.      9752.    55.33    39.87    95.20
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  SPPN  HYDRO00     000000 00                HYDRO    0.00  0.00  0.00   333.   0.
```

```
  15.10  0.00  0.00      601.       418.      1020.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  SPPNMOCC   0522   000000 00              GAS      0.02  0.00  0.00  1437.   0.
  13.90  0.00  1.03        0.       740.       740.     0.00     5.55     5.55
   0.000    0.055    0.055       0.000       0.000         0.295         0.080
IGCC                          10
Turbine                       11
  SPPN  CT   1711   000000 00              GAS      0.10  0.00  0.00    17.   0.
   3.50  0.00  1.03        0.         9.         9.     0.00     0.08     0.08
   0.000    0.004    0.004       0.000       0.000         0.004         0.001
  SPPN  CT   1712   000000 00              GAS      0.10  0.00  0.00   214.   0.
   4.00  0.00  1.03        0.        37.        37.     0.00     0.40     0.40
   0.000    0.020    0.020       0.000       0.000         0.021         0.006
  SPPN  CT   1722   000000 00              GAS      0.09  0.00  0.00   353.   0.
   3.60  0.00  1.03        0.        61.        61.     0.00     0.67     0.67
   0.000    0.031    0.031       0.000       0.000         0.036         0.010
  SPPNMOCT   0511   000000 00              GAS      0.10  0.00  0.00     2.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.001         0.000
  SPPNMOCT   0512   000000 00              GAS      0.11  0.00  0.00   103.   0.
   5.00  0.00  1.03        0.        18.        18.     0.00     0.18     0.18
   0.000    0.010    0.010       0.000       0.000         0.010         0.003
  SPPNMOCT   0522   000000 00              GAS      0.09  0.00  0.00  1320.   0.
   3.70  0.00  1.03        0.       148.       148.     0.00     1.63     1.63
   0.000    0.076    0.076       0.000       0.000         0.086         0.024
Biomass                       12
Geothermal                    13
Landfill Gas                  14
Wind                          15
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
Fossil_Other                  19
Pump Storage                  20
  SPPN  PUMPS00     000000 00              NONE     0.00  0.00 71.00   155.   0.
   6.50  0.00  0.00       51.        37.        89.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                  21
Cgn_Coal                      22
Cgn_Gas                       23
  SPPN  CGCT 1712   000000 00              GAS      0.08  0.00  0.00    15.   0.
   2.80  0.00  1.03        0.         3.         3.     0.00     0.03     0.03
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
Cgn_Oil                       24
Cgn_Other                     25
NonCG IPP_Coal                26
NonCG IPP_Gas                 27
NonCG IPP_Other               28
Blr_Coal                      29
Blr_Gas                       30
Blr_Oil                       31
Blr_Other                     32
SteamOnly Cogen               33
Rep.Coal-CC                   34
Rep.O/G-CC                    35
Rep.Coal-IGCC                 36
Ret.Scrubber                  37
Ret.ExistSCR & Scrub          38
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
Ret.ExistScrub & SCR          41
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
```

```
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2005, Region: SPPS     (Emissions By Plant)
--------------------------------------------------
```

	NOx			SO2	MER	CO2	Carbon
			Generation			Trillion	
	Emission		Emission	Emission	Emission	Emission	Emission
						(lb/MBtu)	(lb/TBtu)
/KWyr	VOM Mill/KWh		(GWh)			(Btu)	
	(1000 Tons)		(1000 Tons)	(Tons)		(Mil Tonnes)	(Mil Tonnes)
Unit					Fuel	NOx	SO2 MERCURY
.	FO&M WINT. SUMM.	WINTER		SUMMER	Total	WINTER	SUMMER
	WINTER SUMMER	Total		Total	Total	Total	Total

```
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  SPPS  TSXSS3642282020104 01              SD2: 6.7 0.31  0.19  4.36   520.   0.
  35.60  2.94  2.94     2158.      1714.      3872.    23.20    18.43    41.63
   3.608    2.865    6.473       3.876       0.091         4.016         1.095
Unscrubbed Coal_NOx            3
  SPPS  TSASN3642282020102 01              SB2: 6.5 0.45  0.73  6.29   490.   0.
  17.60  2.45  2.45     2034.      1615.      3649.    21.76    17.28    39.03
   4.938    3.922    8.861      14.247       0.123         3.766         1.027
Unscrubbed Coal                4
  SPPSTXTCOLU3531292050710 01              BB1: 3.4 0.32  1.00  3.41    26.   0.
```

```
  17.40  1.54  1.54      108.        86.       194.     1.12     0.89     2.01
   0.181    0.144    0.325       1.007       0.003         0.188         0.051
  SPPS  TSASU1041292020210 01              SB2: 6.5 0.33  1.00  6.09  1003.   0.
  17.40  1.54  1.54     4163.      3306.      7469.    41.82    33.22    75.04
   6.838    5.431   12.269      37.519       0.229         7.240         1.974
  SPPS  TSASU3641282020110 01              SB2: 6.5 0.39  0.73  6.29  3838.   0.
  18.00  1.54  1.54    15928.     12651.     28579.   161.43   128.21   289.65
  31.641   25.130   56.771     105.287       0.910        27.945         7.621
  SPPSTXTSASU2341292020210 01              SB2: 6.5 0.27  0.73  6.09  1056.   0.
  19.40  1.54  1.54     4383.      3481.      7863.    44.82    35.59    80.41
   6.028    4.787   10.815      29.390       0.245         7.758         2.116
  SPPSTXTSASU2342292020210 01              SB2: 6.5 0.31  0.73  6.09   528.   0.
  17.40  1.54  1.54     2191.      1740.      3932.    23.34    18.54    41.88
   3.641    2.892    6.533      15.286       0.128         4.041         1.102
  SPPSTXTSASU3541292020110 01              SB2: 6.5 0.26  0.61  6.29   346.   0.
  21.40  1.54  1.54     1436.      1140.      2576.    14.25    11.32    25.57
   1.824    1.449    3.273       7.811       0.080         2.467         0.673
  SPPSTXTSASU3541292020310 01              SB2: 6.5 0.33  0.63  1.75  1800.   0.
  17.40  1.54  1.54     7470.      5933.     13403.    73.17    58.11   131.29
  12.256    9.734   21.990      41.224       0.115        12.666         3.454
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
Hydro                           8
  SPPS  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2445.   0.
  15.00  0.00  0.00     4702.      3448.      8150.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  SPPS  CC   1022   000000 00              GAS      0.02  0.00  0.00   912.   0.
  13.90  1.03  1.03     4087.      3135.      7223.    30.66    23.51    54.17
   0.307    0.235    0.542       0.000       0.000         2.875         0.784
  SPPS  CC   3613   000000 00              GAS      0.14  0.00  0.00    40.   0.
  14.40  0.00  1.03        0.        21.        21.     0.00     0.22     0.22
   0.000    0.015    0.015       0.000       0.000         0.012         0.003
  SPPS  CC   3622   000000 00              GAS      0.03  0.00  0.00  6283.   0.
  14.00  1.03  1.03     3861.     11353.     15214.    29.34    86.29   115.63
   0.499    1.467    1.966       0.000       0.000         6.137         1.674
  SPPS  CC   3623   000000 00              GAS      0.14  0.00  0.00   219.   0.
  19.90  0.00  1.03        0.       113.       113.     0.00     1.12     1.12
   0.000    0.080    0.080       0.000       0.000         0.060         0.016
  SPPS  CC   3624   000000 00              GAS      0.10  0.00  0.00    39.   0.
  13.90  0.00  1.03        0.         7.         7.     0.00     0.10     0.10
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  SPPSMSCC   1613   000000 00              GAS      0.17  0.00  0.00    50.   0.
  19.80  0.00  1.03        0.        26.        26.     0.00     0.26     0.26
   0.000    0.023    0.023       0.000       0.000         0.014         0.004
  SPPSTXCC   2322   000000 00              GAS      0.02  0.00  0.00   745.   0.
  13.90  1.03  1.03     2504.      2300.      4804.    18.78    17.25    36.03
   0.188    0.172    0.360       0.000       0.000         1.912         0.521
  SPPSTXCC   2722   000000 00              GAS      0.02  0.00  0.00  1140.   0.
  13.90  1.03  1.03     5109.      3919.      9028.    38.32    29.39    67.71
   0.383    0.294    0.677       0.000       0.000         3.594         0.980
  SPPSTXCC   3522   000000 00              GAS      0.02  0.00  0.00   551.   0.
  13.90  1.03  1.03     1852.      1894.      3746.    13.89    14.21    28.10
   0.139    0.142    0.281       0.000       0.000         1.491         0.407
IGCC                           10
Turbine                        11
  SPPS  CT   0812   000000 00              GAS      0.13  0.00  0.00     6.   0.
   6.20  0.00  1.03        0.         3.         3.     0.00     0.03     0.03
   0.000    0.002    0.002       0.000       0.000         0.002         0.000
  SPPS  CT   0814   000000 00              GAS      0.11  0.00  0.00    35.   0.
  11.20  0.00  1.03        0.         6.         6.     0.00     0.09     0.09
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  SPPS  CT   0823   000000 00              GAS      0.10  0.00  0.00    66.   0.
   6.20  0.00  1.03        0.        11.        11.     0.00     0.14     0.14
```

```
  0.000    0.007    0.007       0.000       0.000         0.008         0.002
  SPPS  CT   0824   000000 00              GAS      0.11  0.00  0.00   244.   0.
   2.80  0.00  1.03        0.        42.        42.     0.00     0.60     0.60
   0.000    0.033    0.033       0.000       0.000         0.032         0.009
  SPPS  CT   1012   000000 00              GAS      0.10  0.00  0.00     9.   0.
   4.30  0.00  1.03        0.         5.         5.     0.00     0.05     0.05
   0.000    0.002    0.002       0.000       0.000         0.003         0.001
  SPPS  CT   1014   000000 00              GAS      0.11  0.00  0.00    76.   0.
  10.40  0.00  1.03        0.        13.        13.     0.00     0.19     0.19
   0.000    0.011    0.011       0.000       0.000         0.010         0.003
  SPPS  CT   1022   000000 00              GAS      0.08  0.00  0.00   457.   0.
   2.80  0.00  1.03        0.        79.        79.     0.00     0.86     0.86
   0.000    0.034    0.034       0.000       0.000         0.046         0.012
  SPPS  CT   3612   000000 00              GAS      0.11  0.00  0.00    11.   0.
   4.90  0.00  1.03        0.         6.         6.     0.00     0.06     0.06
   0.000    0.003    0.003       0.000       0.000         0.003         0.001
  SPPS  CT   3614   000000 00              GAS      0.11  0.00  0.00   161.   0.
  11.00  0.00  1.03        0.        28.        28.     0.00     0.40     0.40
   0.000    0.021    0.021       0.000       0.000         0.021         0.006
  SPPS  CT   3622   000000 00              GAS      0.08  0.00  0.00   512.   0.
   2.80  0.00  1.03        0.       215.       215.     0.00     2.35     2.35
   0.000    0.094    0.094       0.000       0.000         0.125         0.034
  SPPS  CT   3623   000000 00              GAS      0.10  0.00  0.00    53.   0.
  11.20  0.00  1.03        0.         9.         9.     0.00     0.13     0.13
   0.000    0.006    0.006       0.000       0.000         0.007         0.002
  SPPSMSCT   1614   000000 00              GAS      0.10  0.00  0.00    15.   0.
  11.20  0.00  1.03        0.         3.         3.     0.00     0.04     0.04
   0.000    0.002    0.002       0.000       0.000         0.002         0.001
  SPPSTXCT   2322   000000 00              GAS      0.08  0.00  0.00   100.   0.
   2.80  0.00  1.03        0.        17.        17.     0.00     0.19     0.19
   0.000    0.008    0.008       0.000       0.000         0.010         0.003
  SPPSTXCT   2512   000000 00              GAS      0.10  0.00  0.00     3.   0.
  11.20  0.00  1.03        0.         2.         2.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  SPPSTXCT   2513   000000 00              GAS      0.10  0.00  0.00     5.   0.
  11.20  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  SPPSTXCT   2514   000000 00              GAS      0.10  0.00  0.00    47.   0.
  11.20  0.00  1.03        0.         8.         8.     0.00     0.12     0.12
   0.000    0.006    0.006       0.000       0.000         0.006         0.002
  SPPSTXCT   2524   000000 00              GAS      0.10  0.00  0.00    48.   0.
  11.20  0.00  1.03        0.         8.         8.     0.00     0.12     0.12
   0.000    0.006    0.006       0.000       0.000         0.006         0.002
  SPPSTXCT   2722   000000 00              GAS      0.08  0.00  0.00    95.   0.
   2.80  0.00  1.03        0.        49.        49.     0.00     0.54     0.54
   0.000    0.022    0.022       0.000       0.000         0.029         0.008
  SPPSTXCT   3513   000000 00              GAS      0.10  0.00  0.00     2.   0.
   2.80  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SPPSTXCT   3514   000000 00              GAS      0.10  0.00  0.00    43.   0.
  11.20  0.00  1.03        0.         7.         7.     0.00     0.11     0.11
   0.000    0.005    0.005       0.000       0.000         0.006         0.002
Biomass                        12
Geothermal                     13
Landfill Gas                   14
  SPPS  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     9.   0.
  78.60 10.48 10.48       40.        31.        71.     0.55     0.42     0.97
   0.068    0.052    0.119       0.000       0.000         0.000         0.000
Wind                           15
  SPPS  WIND 00     000000 00              NONE     0.00  0.00 71.00    66.   0.
  26.40  0.00  0.00       66.        37.       102.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
```

```
  SPPS  OTHER00     000000 00                NONE     0.00  0.00  0.00    13.   0.
 103.60  0.00  0.00       57.        45.       102.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SPPS  OTHER00     000000 00                NONE     0.00  0.00  0.00    10.   0.
 103.60  0.00  0.00       44.        35.        79.     0.48     0.38     0.87
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
  SPPS  PUMPS00     000000 00                NONE     0.00  0.00 71.00   288.   0.
   6.50  0.00  0.00        0.        43.        43.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
  SPPS  CGCOU3641282050710 01                SB2: 6.5 0.39  1.00  6.48   307.   0.
  11.70  1.54  1.54     1243.      1003.      2246.    10.63     8.57    19.20
   2.067    1.668    3.734       9.600       0.062         1.852         0.505
Cgn_Gas                        23
  SPPS  CGCT 1012   000000 00                GAS      0.09  0.00  0.00     4.   0.
   2.80  0.00  1.03        0.         2.         2.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  SPPS  CGCT 3612   000000 00                GAS      0.11  0.00  0.00    43.   0.
   2.80  0.00  1.03        0.        22.        22.     0.00     0.21     0.21
   0.000    0.011    0.011       0.000       0.000         0.011         0.003
  SPPS  CGCT 3622   000000 00                GAS      0.11  0.00  0.00    55.   0.
   2.80  0.00  1.03        0.        28.        28.     0.00     0.28     0.28
   0.000    0.015    0.015       0.000       0.000         0.015         0.004
  SPPSTXCGCT 3512   000000 00                GAS      0.10  0.00  0.00    20.   0.
   2.80  0.00  1.03        0.        10.        10.     0.00     0.10     0.10
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  SPPSTXCGCT 3522   000000 00                GAS      0.10  0.00  0.00   254.   0.
   2.80  0.00  1.03        0.       131.       131.     0.00     1.26     1.26
   0.000    0.063    0.063       0.000       0.000         0.067         0.018
  SPPS  CGCC 1022   000000 00                GAS      0.02  0.00  0.00   448.   0.
  13.90  1.03  1.03     1519.      1540.      3060.    11.40    11.55    22.95
   0.114    0.116    0.229       0.000       0.000         1.218         0.332
  SPPS  CGCC 3622   000000 00                GAS      0.02  0.00  0.00   450.   0.
  13.90  1.03  1.03     2017.      1547.      3564.    15.13    11.60    26.73
   0.151    0.116    0.267       0.000       0.000         1.418         0.387
  SPPS  CGCC 3623   000000 00                GAS      0.18  0.00  0.00   108.   0.
  13.90  0.00  1.03        0.        56.        56.     0.00     0.55     0.55
   0.000    0.050    0.050       0.000       0.000         0.029         0.008
Cgn_Oil                        24
Cgn_Other                      25
  SPPS  CGBIO00  51 000000 00                B1-: 0.6 0.02  0.08  0.57     2.   0.
  44.80  5.36  5.36        9.         7.        15.     0.07     0.06     0.13
   0.001    0.001    0.001       0.005       0.000         0.000         0.000
  SPPS  CGOTH00     000000 00                NONE     0.00  0.00  0.00    34.   0.
 103.60  0.00  0.00      147.       114.       261.     0.59     0.45     1.04
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
```

```
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
Ret.ExistScrub+GasR             47
Ret.GasReburn+Scrub             48
Ret.ACI                         49
Ret.ExistScrub&ACI              50
Ret.ExistSCR&ACI                51
Ret.ExistSNCR&ACI               52
Ret.ACI & SCR                   53
Ret.ExistScrub&ACI&SCR          54
Ret.ACI & SNCR                  55
Ret.ExistScrub&ACI&SNCR         56
Ret.ACI & Srub                  57
Ret.ExistSCR&ACI&Scrub          58
Ret.ExistSNCR&ACI&Scrub         59
Ret.ExistSNCR&ExistScrub&ACI    60
Ret.ExistSCR&ExistScrub&ACI     61
Ret.ExistNOx&ExistScrub&ACI     62
Ret.SCR & Scrub & ACI           63
Ret.SNCR & Scrub & ACI          64
Ret.O/G SCR                     65
Ret.O/G SNCR                    66
Ret.Nuclear (age 30+10 yrs)     67
Ret.Nuclear (age 40+20 yrs)     68
Ret. Biomass Cofiring           69
CT Early Retirement             70
CC Early Retirement             71
O/G Early Retirement            72
Coal Early Retirement           73
Nuke Early Retirement           74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2005, Region: CALI     (Emissions By Plant)
--------------------------------------------------
```

| | NOx | | | SO2 | | MER | CO2 | | Carbon | | |

```
  21.40  1.54  1.54      241.       191.       432.     2.91     2.31     5.22
   0.582    0.462    1.045       2.611       0.011         0.486         0.133
Oil/Gas Steam                   5
  CALI  STLSU0821   000000 00              GAS      0.02  0.00  0.00  5179.   0.
  20.90  2.57  2.57    13334.      5410.     18744.   127.14    51.59   178.72
   1.271    0.516    1.787       0.000       0.000         9.485         2.587
Oil/Gas Steam_Nox               6
  CALI  STLSC0821   000000 00              GAS      0.01  0.00  0.00  4755.   0.
  22.40  2.67  2.67      103.        82.       185.     0.97     0.77     1.74
   0.006    0.005    0.011       0.000       0.000         0.092         0.025
Nuclear                         7
  CALI  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1070.   0.
 140.30  0.86  0.86     5114.      3831.      8945.    50.56    37.88    88.44
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  CALI  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1095.   0.
  95.90  0.62  0.62     5037.      3751.      8789.    52.66    39.22    91.88
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  CALI  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1109.   0.
  95.90  0.62  0.62     5642.      3429.      9071.    59.26    36.01    95.27
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  CALI  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1080.   0.
 140.30  0.86  0.86     3804.      3962.      7766.    37.61    39.17    76.78
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  CALI  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00 11313.   0.
  15.00  0.00  0.00    16750.     17655.     34405.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  CALI  CC   0812   000000 00              GAS      0.10  0.00  0.00    40.   0.
  14.90  1.03  1.03      134.       103.       238.     1.18     0.91     2.09
   0.059    0.045    0.105       0.000       0.000         0.111         0.030
  CALI  CC   0813   000000 00              GAS      0.02  0.00  0.00    65.   0.
  14.40  0.00  1.03        0.        11.        11.     0.00     0.12     0.12
   0.000    0.001    0.001       0.000       0.000         0.007         0.002
  CALI  CC   0822   000000 00              GAS      0.02  0.00  0.00  5856.   0.
  13.90  1.03  1.03    26245.     20132.     46377.   197.65   151.61   349.27
   1.977    1.516    3.493       0.000       0.000        18.536         5.055
  CALI  CC   0823   000000 00              GAS      0.02  0.00  0.00   513.   0.
  14.40  1.03  1.03      115.        88.       203.     1.18     0.90     2.08
   0.011    0.008    0.019       0.000       0.000         0.110         0.030
IGCC                           10
Turbine                        11
  CALI  CT   0812   000000 00              GAS      0.13  0.00  0.00     3.   0.
   4.50  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  CALI  CT   0821   000000 00              GAS      0.10  0.00  0.00    48.   0.
   2.80  1.03  1.03      167.       124.       291.     1.53     1.14     2.68
   0.078    0.058    0.137       0.000       0.000         0.142         0.039
  CALI  CT   0822   000000 00              GAS      0.08  0.00  0.00  2209.   0.
   2.80  0.00  1.03        0.       380.       380.     0.00     4.16     4.16
   0.000    0.166    0.166       0.000       0.000         0.221         0.060
Biomass                        12
  CALI  BIOMS00  54 000000 00              B1-: 0.6 0.02  0.08  0.57   432.   0.
  44.80  5.36  5.36     1872.      1447.      3319.    17.09    13.21    30.30
   0.171    0.132    0.303       1.212       0.009         0.000         0.000
Geothermal                     13
  CALI  GEO  00     000000 00              GEOTH    0.00  0.00  2.97  2665.   0.
  87.40  0.00  0.00    11344.      8966.     20310.   291.69   230.53   522.21
   0.000    0.000    0.000       0.000       0.775         0.000         0.000
Landfill Gas                   14
  CALI  LFGAS00     000000 00              WASTE    0.25  0.00  0.00   216.   0.
  78.60 10.48 10.48      966.       737.      1703.    12.24     9.34    21.58
   1.506    1.148    2.654       0.000       0.000         0.000         0.000
Wind                           15
  CALI  WIND 00     000000 00              NONE     0.00  0.00 71.00  1931.   0.
```

```
  26.40  0.00  0.00     4635.      2599.      7234.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
  CALI  SOLAR00     000000 00              NONE     0.00  0.00 71.00   324.   0.
  47.00  0.00  0.00      516.       274.       790.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other                18
  CALI  OTHER00     000000 00              NONE     0.00  0.00 27.90   178.   0.
 103.60  0.00  0.00      785.       619.      1403.     9.00     7.10    16.10
   0.000    0.000    0.000       0.000       0.225         0.000         0.000
Fossil_Other                    19
  CALI  WASTE081    000000 00              WASTE    0.13  0.00  0.00    20.   0.
 103.60  0.00  0.00       89.        68.       158.     0.98     0.75     1.73
   0.064    0.049    0.114       0.000       0.000         0.000         0.000
Pump Storage                    20
  CALI  PUMPS00     000000 00              NONE     0.00  0.00 71.00  4432.   0.
   6.50  0.00  0.00        0.       115.       115.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                    21
Cgn_Coal                        22
  CALI  CGCOU0811372050710 01            BB2: 4.1 0.09  1.00  4.10    68.   0.
  15.50  1.54  1.54      275.       222.       497.     2.47     1.99     4.46
   0.111    0.090    0.200       2.228       0.009         0.415         0.113
  CALI  CGCOU0831372050710 01            BB2: 4.1 0.09  1.00  4.10   153.   0.
  11.70  1.54  1.54      619.       500.      1119.     5.37     4.34     9.71
   0.242    0.195    0.437       4.854       0.020         0.904         0.247
  CALI  CGCOU0832372050710 01            BB2: 4.1 0.09  1.00  4.10    69.   0.
  11.70  1.54  1.54      279.       225.       505.     3.05     2.46     5.51
   0.137    0.111    0.248       2.753       0.011         0.513         0.140
  CALI  CGCOD0831372050307 01            BD1: 5.1 0.09  0.36  0.15    45.   0.
  35.80  3.84  3.84      182.       147.       329.     1.49     1.20     2.69
   0.067    0.054    0.121       0.484       0.000         0.250         0.068
Cgn_Gas                         23
  CALI  CGCT 0811   000000 00              GAS      0.09  0.00  0.00    25.   0.
   2.80  1.03  1.03      116.        65.       181.     0.99     0.56     1.55
   0.046    0.026    0.071       0.000       0.000         0.082         0.022
  CALI  CGCT 0812   000000 00              GAS      0.09  0.00  0.00   369.   0.
   3.30  1.03  1.03     1281.       956.      2238.    12.33     9.21    21.54
   0.567    0.424    0.991       0.000       0.000         1.143         0.312
  CALI  CGCT 0821   000000 00              GAS      0.09  0.00  0.00   162.   0.
   2.80  1.03  1.03      750.       504.      1254.     6.36     4.27    10.64
   0.293    0.197    0.489       0.000       0.000         0.564         0.154
  CALI  CGCT 0822   000000 00              GAS      0.09  0.00  0.00  2348.   0.
   2.90  1.03  1.03     5185.       404.      5590.    52.31     4.08    56.40
   2.406    0.188    2.594       0.000       0.000         2.993         0.816
  CALI  CGCC 0811   000000 00              GAS      0.02  0.00  0.00     1.   0.
  13.90  1.03  1.03        4.         3.         8.     0.03     0.02     0.05
   0.000    0.000    0.000       0.000       0.000         0.003         0.001
  CALI  CGCC 0812   000000 00              GAS      0.02  0.00  0.00   213.   0.
  14.20  1.03  1.03      955.       732.      1687.     7.95     6.10    14.04
   0.072    0.055    0.126       0.000       0.000         0.745         0.203
  CALI  CGCC 0813   000000 00              GAS      0.02  0.00  0.00   319.   0.
  14.50  1.03  1.03     1072.       822.      1895.    10.35     7.94    18.29
   0.093    0.071    0.165       0.000       0.000         0.971         0.265
  CALI  CGCC 0822   000000 00              GAS      0.02  0.00  0.00  2938.   0.
  13.90  1.03  1.03    13168.     10100.     23268.   100.71    77.25   177.95
   1.007    0.772    1.780       0.000       0.000         9.444         2.576
  CALI  CGCC 0823   000000 00              GAS      0.02  0.00  0.00   840.   0.
  14.60  1.03  1.03     2824.      2166.      4989.    27.35    20.98    48.32
   0.246    0.189    0.435       0.000       0.000         2.564         0.699
Cgn_Oil                         24
  CALI  CGLSN0821   000000 00              GAS      0.02  0.00  0.00   430.   0.
  21.60  3.02  3.02     1741.      1405.      3145.    13.16    10.62    23.79
   0.099    0.080    0.178       0.000       0.000         1.262         0.344
```

```
Cgn_Other                       25
  CALI  CGBIO00  54 000000 00              B1-: 0.6 0.02  0.08  0.57    74.   0.
  44.80  5.36  5.36      321.       248.       569.     2.80     2.17     4.97
   0.028    0.022    0.050       0.199       0.001         0.000         0.000
  CALI  CGFWT082    000000 00              WASTE    0.13  0.02 20.87    29.   0.
 103.60  0.00  0.00      130.        99.       229.     0.77     0.59     1.36
   0.050    0.038    0.089       0.011       0.014         0.000         0.000
  CALI  CGOTH00     000000 00              NONE     0.00  0.00  0.00    29.   0.
 103.60  0.00  0.00      126.        97.       223.     0.53     0.41     0.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
Ret.ExistScrub & SCR            41
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
Ret.ExistScrub+GasR             47
Ret.GasReburn+Scrub             48
Ret.ACI                         49
Ret.ExistScrub&ACI              50
Ret.ExistSCR&ACI                51
Ret.ExistSNCR&ACI               52
Ret.ACI & SCR                   53
Ret.ExistScrub&ACI&SCR          54
Ret.ACI & SNCR                  55
Ret.ExistScrub&ACI&SNCR         56
Ret.ACI & Srub                  57
Ret.ExistSCR&ACI&Scrub          58
Ret.ExistSNCR&ACI&Scrub         59
Ret.ExistSNCR&ExistScrub&ACI    60
Ret.ExistSCR&ExistScrub&ACI     61
Ret.ExistNOx&ExistScrub&ACI     62
Ret.SCR & Scrub & ACI           63
Ret.SNCR & Scrub & ACI          64
Ret.O/G SCR                     65
Ret.O/G SNCR                    66
Ret.Nuclear (age 30+10 yrs)     67
Ret.Nuclear (age 40+20 yrs)     68
Ret. Biomass Cofiring           69
CT Early Retirement             70
CC Early Retirement             71
O/G Early Retirement            72
Coal Early Retirement           73
Nuke Early Retirement           74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Year: 2005, Region: PNW      (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  PNW WATSBSS0741372020103 01              SE1: 5.5 0.40  0.11  4.65  1340.   0.
  42.70  2.94  2.94     5561.      4417.      9978.    56.95    45.23   102.17
  11.389    9.046   20.435       5.364       0.237         9.858         2.688
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  PNW   TABU 0711371030710 01              BD1: 5.1 0.90  0.61  5.07    25.   0.
  32.00  1.54  1.54      104.        82.       186.     1.08     0.86     1.94
   0.483    0.384    0.866       0.595       0.005         0.180         0.049
  PNW ORTSASU0842372020110 01              SB1: 4.5 0.42  0.74  4.41   508.   0.
  17.40  1.54  1.54     2108.      1674.      3783.    22.85    18.14    40.99
   4.798    3.810    8.608      15.187       0.090         3.955         1.079
Oil/Gas Steam                  5
  PNW   STLSU0721   000000 00              GAS      0.36  0.00  0.00    47.   0.
  10.70  0.00  2.57        0.       155.       155.     0.00     1.64     1.64
   0.000    0.296    0.296       0.000       0.000         0.087         0.024
Oil/Gas Steam_Nox              6
Nuclear                        7
  PNW   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1123.   0.
 103.70  0.66  0.66     5713.      3138.      8851.    57.49    31.58    89.07
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  PNW   HYDRO00     000000 00              HYDRO    0.00  0.00  0.00 42633.   0.
  14.80  0.00  0.00    63340.     47747.    111087.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  PNW   CC   0722   000000 00              GAS      0.03  0.00  0.00  1512.   0.
  13.90  1.03  1.03     6776.      5198.     11974.    51.93    39.84    91.77
   0.727    0.558    1.285       0.000       0.000         4.870         1.328
  PNW   CC   0822   000000 00              GAS      0.06  0.00  0.00  1533.   0.
  13.90  1.03  1.03     6871.      5270.     12141.    54.27    41.63    95.90
   1.520    1.166    2.685       0.000       0.000         5.089         1.388
IGCC                          10
Turbine                       11
  PNW   CT   0722   000000 00              GAS      0.09  0.00  0.00  1151.   0.
   2.80  1.03  1.03     2667.      3978.      6645.    28.78    42.93    71.71
   1.309    1.953    3.263       0.000       0.000         3.806         1.038
  PNW   CT   0812   000000 00              GAS      0.13  0.00  0.00     3.   0.
   2.80  1.03  1.03       14.        10.        24.     0.13     0.10     0.23
   0.008    0.006    0.015       0.000       0.000         0.012         0.003
  PNW   CT   0822   000000 00              GAS      0.09  0.00  0.00   371.   0.
   2.80  1.03  1.03     1717.      1282.      3000.    18.41    13.74    32.15
   0.810    0.605    1.415       0.000       0.000         1.706         0.465
Biomass                       12
  PNW   BIOMS00  52 000000 00              B1-: 0.6 0.02  0.08  0.57     6.   0.
  44.80  5.36  5.36       26.        20.        46.     0.21     0.16     0.37
```

```
   0.002    0.002    0.004       0.015       0.000         0.000         0.000
Geothermal                      13
  PNW   GEO  00     000000 00              GEOTH    0.00  0.00  3.70     8.   0.
  87.40  0.00  0.00       34.        27.        61.     1.10     0.87     1.97
   0.000    0.000    0.000       0.000       0.004         0.000         0.000
Landfill Gas                    14
  PNW   LFGAS00     000000 00              WASTE    0.25  0.00  0.00    21.   0.
  78.60 10.48 10.48       94.        72.       166.     1.28     0.98     2.26
   0.158    0.120    0.278       0.000       0.000         0.000         0.000
Wind                            15
  PNW   WIND 00     000000 00              NONE     0.00  0.00 71.00   412.   0.
  26.40  0.00  0.00      185.       104.       290.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  PNW   OTHER00     000000 00              NONE     0.00  0.00 40.61    58.   0.
 103.60  0.00  0.00      256.       202.       457.     2.81     2.22     5.03
   0.000    0.000    0.000       0.000       0.102         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
  PNW   WAIMP00     000000 00              NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00     5465.      3944.      9408.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                        22
Cgn_Gas                         23
  PNW   CGCC 0722   000000 00              GAS      0.07  0.00  0.00   165.   0.
  13.90  1.03  1.03      739.       567.      1307.     5.34     4.09     9.43
   0.181    0.139    0.321       0.000       0.000         0.501         0.137
  PNW   CGCC 0723   000000 00              GAS      0.07  0.00  0.00   123.   0.
  13.90  1.03  1.03      551.       423.       974.     5.42     4.16     9.57
   0.184    0.141    0.326       0.000       0.000         0.508         0.139
  PNW   CGCC 0812   000000 00              GAS      0.08  0.00  0.00    13.   0.
  13.90  1.03  1.03       58.        45.       103.     0.45     0.35     0.80
   0.017    0.013    0.031       0.000       0.000         0.042         0.012
  PNW   CGCC 0822   000000 00              GAS      0.05  0.00  0.00   820.   0.
  13.90  1.03  1.03     3675.      2819.      6494.    28.03    21.50    49.53
   0.743    0.570    1.313       0.000       0.000         2.629         0.717
Cgn_Oil                         24
Cgn_Other                       25
  PNW   CGBIO00  52 000000 00              B1-: 0.6 0.02  0.08  0.57    96.   0.
  44.80  5.36  5.36      416.       321.       738.     3.55     2.75     6.30
   0.036    0.027    0.063       0.252       0.002         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
Ret.ExistScrub & SCR            41
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
```

```
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2005, Region: AZNM     (Emissions By Plant)
--------------------------------------------------
```

| | NOx | | | SO2 | | MER | | CO2 | | Carbon | | |

```
   5.379    4.272    9.651       4.886       0.006         4.494         1.226
  AZNM  TSUBS0841362020703 01              BD1: 5.1 0.40  0.52  2.94   355.   0.
  41.30  2.94  2.94     1473.      1170.      2643.    15.27    12.13    27.40
   3.055    2.426    5.481       7.070       0.040         2.552         0.696
  AZNM  TSXBS0841362020303 01              BD1: 5.1 0.46  0.07  0.15   275.   0.
  35.60  2.94  2.94     1141.       906.      2048.    11.87     9.43    21.30
   2.730    2.168    4.898       0.783       0.002         1.983         0.541
  AZNM  TSXBS0841362020703 01              BD1: 5.1 0.46  0.06  2.94   220.   0.
  42.80  2.94  2.94      913.       725.      1638.     9.59     7.61    17.20
   2.205    1.751    3.956       0.490       0.025         1.602         0.437
  AZNM  TSXBS0842362020703 01              BD1: 5.1 0.46  0.06  2.94   110.   0.
  37.70  2.94  2.94      457.       363.       819.     4.98     3.95     8.93
   1.144    0.909    2.053       0.254       0.013         0.831         0.227
  AZNM  TSXSS0841351020303 01              SD2: 6.7 0.57  0.31  1.81  1480.   0.
  42.70  2.94  2.94     6142.      4878.     11021.    59.34    47.13   106.47
  16.912   13.432   30.344      16.694       0.096        10.272         2.801
  AZNM  TSXSS0841352020203 01              SD2: 6.7 0.46  0.36  5.36   498.   0.
  35.60  2.94  2.94     2067.      1641.      3708.    21.47    17.05    38.53
   4.938    3.922    8.861       6.931       0.103         3.717         1.014
  AZNM  TSXSS0841352020303 01              SD2: 6.7 0.34  0.06  1.81   235.   0.
  35.60  2.94  2.94      975.       775.      1750.    10.15     8.06    18.21
   1.725    1.370    3.096       0.523       0.016         1.757         0.479
  AZNM  TSXSS0842351020203 01              SD2: 6.7 0.46  0.28  5.36   312.   0.
  42.70  2.94  2.94     1295.      1028.      2323.    16.66    13.23    29.90
   3.833    3.044    6.876       4.207       0.080         2.885         0.787
  AZNM  TSXSS0842351020703 01              SD2: 6.7 0.46  0.31  4.69   220.   0.
  43.00  2.94  2.94      913.       725.      1638.    10.07     8.00    18.07
   2.316    1.839    4.156       2.808       0.042         1.743         0.475
  AZNM  TSXSS0842352020203 01              SD2: 6.7 0.46  0.36  5.36   804.   0.
  36.50  2.94  2.94     3337.      2650.      5987.    39.59    31.44    71.03
   9.105    7.231   16.336      12.828       0.190         6.853         1.869
  AZNM  TSXSS0842352020703 01              SD2: 6.7 0.46  0.31  4.69   340.   0.
  43.00  2.94  2.94     1411.      1121.      2532.    15.17    12.05    27.22
   3.489    2.771    6.260       4.229       0.064         2.626         0.716
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  AZNM  TSBBU0841361020310 01              BB1: 3.4 0.46  0.77  0.38   156.   0.
  32.00  1.54  1.54      647.       514.      1162.     6.62     5.25    11.87
   1.522    1.209    2.730       4.570       0.002         1.105         0.301
  AZNM  TSBBU0841362020210 01              BB1: 3.4 0.40  0.78  3.07   260.   0.
  17.40  1.54  1.54     1079.       857.      1936.    11.22     8.91    20.13
   2.244    1.782    4.027       7.862       0.031         1.875         0.511
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  AZNM  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1255.   0.
  84.20  0.42  0.42     5779.      4493.     10272.    61.46    47.78   109.24
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1310.   0.
  84.20  0.42  0.42     5677.      4656.     10334.    59.61    48.89   108.50
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1259.   0.
  84.20  0.42  0.42     5282.      4614.      9895.    55.13    48.16   103.30
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  AZNM  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2490.   0.
  15.40  0.00  0.00     3484.      3538.      7022.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  AZNM  CC   0812   000000 00              GAS      0.16  0.00  0.00    19.   0.
  13.90  0.00  1.03        0.        10.        10.     0.00     0.08     0.08
   0.000    0.006    0.006       0.000       0.000         0.004         0.001
  AZNM  CC   0822   000000 00              GAS      0.02  0.00  0.00  8832.   0.
  13.90  1.03  1.03    28159.     23869.     52028.   212.12   179.81   391.93
   2.545    2.158    4.703       0.000       0.000        20.800         5.673
```

```
  AZNM  CC   0823   000000 00              GAS      0.15  0.00  0.00   510.   0.
  14.50  0.00  1.03        0.       251.       251.     0.00     2.47     2.47
   0.000    0.190    0.190       0.000       0.000         0.131         0.036
IGCC                          10
Turbine                       11
Biomass                       12
  AZNM  BIOMS00  53 000000 00              B1-: 0.6 0.02  0.08  0.57    18.   0.
  44.80  5.36  5.36       78.        60.       138.     0.62     0.48     1.11
   0.006    0.005    0.011       0.044       0.000         0.000         0.000
Geothermal                    13
  AZNM  GEO  00     000000 00              GEOTH    0.00  0.00  3.70    29.   0.
  87.40  0.00  0.00      123.        98.       221.     3.99     3.15     7.14
   0.000    0.000    0.000       0.000       0.013         0.000         0.000
Landfill Gas                  14
  AZNM  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    11.   0.
  78.60 10.48 10.48       49.        38.        87.     0.67     0.51     1.18
   0.083    0.063    0.146       0.000       0.000         0.000         0.000
Wind                          15
  AZNM  WIND 00     000000 00              NONE     0.00  0.00 71.00    49.   0.
  26.40  0.00  0.00      102.        57.       159.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
  AZNM  SOLAR00     000000 00              NONE     0.00  0.00 71.00    61.   0.
  47.00  0.00  0.00       17.        12.        29.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other              18
Fossil_Other                  19
Pump Storage                  20
  AZNM  PUMPS00     000000 00              NONE     0.00  0.00 71.00   185.   0.
   6.50  0.00  0.00        0.        46.        46.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                  21
Cgn_Coal                      22
Cgn_Gas                       23
  AZNM  CGCT 0822   000000 00              GAS      0.11  0.00  0.00    57.   0.
   2.80  0.00  1.03        0.        10.        10.     0.00     0.10     0.10
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  AZNM  CGCC 0812   000000 00              GAS      0.15  0.00  0.00    73.   0.
  13.90  0.00  1.03        0.        38.        38.     0.00     0.32     0.32
   0.000    0.023    0.023       0.000       0.000         0.017         0.005
  AZNM  CGCC 0813   000000 00              GAS      0.15  0.00  0.00   102.   0.
  13.90  0.00  1.03        0.        53.        53.     0.00     0.49     0.49
   0.000    0.036    0.036       0.000       0.000         0.026         0.007
  AZNM  CGCC 0822   000000 00              GAS      0.04  0.00  0.00  1190.   0.
  13.90  0.00  1.03        0.       613.       613.     0.00     4.65     4.65
   0.000    0.086    0.086       0.000       0.000         0.247         0.067
  AZNM  CGCC 0823   000000 00              GAS      0.15  0.00  0.00   113.   0.
  13.90  0.00  1.03        0.        58.        58.     0.00     0.55     0.55
   0.000    0.041    0.041       0.000       0.000         0.029         0.008
Cgn_Oil                       24
Cgn_Other                     25
NonCG IPP_Coal                26
NonCG IPP_Gas                 27
NonCG IPP_Other               28
Blr_Coal                      29
Blr_Gas                       30
Blr_Oil                       31
Blr_Other                     32
SteamOnly Cogen               33
Rep.Coal-CC                   34
Rep.O/G-CC                    35
Rep.Coal-IGCC                 36
Ret.Scrubber                  37
Ret.ExistSCR & Scrub          38
```

```
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
Ret.ExistScrub & SCR          41
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2005, Region: RMPA     (Emissions By Plant)
--------------------------------------------------
```

	NOx		SO2	MER	CO2	Carbon
	Emission	Generation Emission	Emission	Emission (lb/MBtu)	Emission (lb/TBtu)	Trillion Emission (MW)
$ /KWyr	VOM Mill/KWh	(GWh)		(Btu)		
	(1000 Tons)	(1000 Tons)	(Tons)	(Mil Tonnes)	(Mil Tonnes)	

```
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  RMPA  TCOLA0831402020105 01              BE1: 6.1 0.11  0.11  0.61    80.   0.
  23.60  3.91  3.91      332.       264.       596.     2.99     2.37     5.36
   0.164    0.131    0.295       0.295       0.002         0.499         0.136
Scrubbed Coal                  2
```

```
  RMPA  TRRBS0832342030304 01                BD1: 5.1 0.26  0.53  0.25   100.   0.
  23.10  2.94  2.94      415.       224.       639.     4.84     2.61     7.45
   0.630    0.339    0.969       1.962       0.001         0.694         0.189
  RMPA  TSABS0841341020303 01                BD1: 5.1 0.46  0.08  0.15   158.   0.
  43.00  2.94  2.94      656.       521.      1177.     6.64     5.28    11.92
   1.528    1.213    2.741       0.447       0.001         1.110         0.303
  RMPA  TSABS0841341020304 01                BD1: 5.1 0.80  0.15  0.25   107.   0.
  43.00  2.94  2.94      444.       353.       797.     4.48     3.56     8.03
   1.790    1.422    3.213       0.602       0.001         0.748         0.204
  RMPA  TSABS0841342020303 01                BD1: 5.1 0.40  0.08  0.15   352.   0.
  42.70  2.94  2.94     1461.      1160.      2621.    14.07    11.17    25.24
   2.814    2.235    5.048       0.947       0.002         2.351         0.641
  RMPA  TSABS0841342020304 01                BD1: 5.1 0.43  0.53  0.25   446.   0.
  42.80  2.94  2.94     1851.      1232.      3083.    19.47    12.96    32.43
   4.138    2.754    6.892       8.636       0.004         3.020         0.824
  RMPA  TSUBS0841332020304 01                BD1: 5.1 0.33  0.08  0.25   262.   0.
  35.60  2.94  2.94     1087.       864.      1951.    11.40     9.05    20.45
   1.880    1.493    3.374       0.767       0.003         1.904         0.519
  RMPA  TSUBS0842332020203 01                BD1: 5.1 0.33  0.15  2.94   856.   0.
  35.60  2.94  2.94     3553.      2821.      6374.    37.81    30.03    67.85
   6.334    5.030   11.364       4.987       0.100         6.318         1.723
  RMPA  TSUBS0842332020304 01                BD1: 5.1 0.45  0.15  0.25   519.   0.
  36.10  2.94  2.94     2154.      1711.      3865.    22.90    18.19    41.08
   5.106    4.056    9.162       3.081       0.005         3.826         1.043
  RMPA  TSXSS0832402020104 01                SD2: 6.7 0.18  0.13  4.36    80.   0.
  23.10  2.94  2.94      332.       264.       596.     3.82     3.03     6.85
   0.344    0.273    0.617       0.456       0.015         0.661         0.180
  RMPAWYTSZLS0841322020103 01                SE1: 5.5 0.32  0.05  4.65  1100.   0.
  35.60  2.94  2.94     4565.      3626.      8191.    47.59    37.80    85.39
   7.615    6.048   13.662       2.152       0.198         8.238         2.247
  RMPA  TSASS0841342020303 01                SD2: 6.7 0.40  0.07  1.81   178.   0.
  43.00  2.94  2.94      739.       587.      1325.     7.42     5.90    13.32
   1.485    1.179    2.664       0.466       0.012         1.285         0.350
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  RMPA  TCOLU0811351020710 01                BB1: 3.4 0.91  1.00  3.41     7.   0.
  32.00  1.54  1.54        29.        23.        52.     0.30     0.24     0.54
   0.137    0.109    0.247       0.271       0.001         0.050         0.014
  RMPA  TCOLU0811402050110 01                BB1: 3.4 0.46  0.41  2.18    30.   0.
  32.00  1.54  1.54        95.         0.        95.     0.99     0.00     0.99
   0.229    0.000    0.229       0.201       0.001         0.092         0.025
  RMPA  TCOLU0811402050110 01                BB2: 4.1 0.46  0.41  2.62    30.   0.
  32.00  1.54  1.54        30.        99.       129.     0.31     1.03     1.34
   0.072    0.239    0.311       0.273       0.002         0.125         0.034
  RMPA  TCOLU0811342050710 01                BB1: 3.4 0.46  0.64  3.41    19.   0.
  32.00  1.54  1.54        79.        63.       141.     0.82     0.65     1.47
   0.189    0.150    0.340       0.474       0.003         0.137         0.037
  RMPA  TCOLU0811352050710 01                BB1: 3.4 0.47  0.45  3.41     5.   0.
  32.00  1.54  1.54        21.        16.        37.     0.22     0.17     0.39
   0.051    0.040    0.091       0.087       0.001         0.036         0.010
  RMPA  TCOLU0831331020310 01                BB1: 3.4 0.80  1.00  0.38    45.   0.
  32.00  1.54  1.54       187.       148.       335.     1.94     1.54     3.48
   0.777    0.617    1.394       1.742       0.001         0.325         0.089
  RMPA  TOLSU0812321020110 01                SB1: 4.5 1.28  1.00  4.41    15.   0.
  26.40  1.54  1.54        62.        49.       112.     0.87     0.69     1.55
   0.553    0.439    0.992       0.776       0.003         0.150         0.041
  RMPA  TSABU0841341020310 01                BB1: 3.4 0.80  0.74  0.38   106.   0.
  32.00  1.54  1.54       440.       349.       789.     4.60     3.65     8.25
   1.839    1.460    3.299       3.039       0.002         0.768         0.209
  RMPA  TSABU0841342020310 01                BB1: 3.4 0.46  0.70  0.38   208.   0.
  17.40  1.54  1.54       863.       686.      1549.     8.68     6.89    15.57
   1.995    1.585    3.580       5.425       0.003         1.450         0.395
  RMPA  TSASU0832342020310 01                SB2: 6.5 0.46  1.00  1.75    49.   0.
  32.00  1.54  1.54       203.       135.       339.     2.21     1.47     3.69
   0.509    0.339    0.848       1.844       0.003         0.356         0.097
```

```
  RMPA  TSASU0841342020310 01              SB2: 6.5 0.44  0.65  1.75  1155.   0.
  19.70  1.54  1.54     4793.      3807.      8600.    49.38    39.22    88.59
  10.937    8.686   19.623      28.793       0.078         8.547         2.331
  RMPA  TSBBU0812341020710 01              BB1: 3.4 0.96  1.00  3.41    48.   0.
  32.00  1.54  1.54      199.       158.       357.     2.50     1.99     4.49
   1.204    0.956    2.160       2.246       0.008         0.418         0.114
  RMPA  TSCBU0832342020310 01              BB1: 3.4 0.46  0.61  0.38   126.   0.
  28.50  1.54  1.54      523.       415.       938.     6.01     4.77    10.78
   1.381    1.097    2.478       3.303       0.002         1.003         0.274
  RMPA  TSCBU0841342020310 01              BB1: 3.4 0.46  0.61  0.38   133.   0.
  26.40  1.54  1.54      552.       438.       990.     5.79     4.60    10.39
   1.331    1.057    2.389       3.194       0.002         0.967         0.264
  RMPA  TSLSU0712261020110 01              SB1: 4.5 1.27  0.67  4.41    22.   0.
  32.00  1.54  1.54       91.        32.       124.     1.10     0.39     1.49
   0.698    0.248    0.946       0.498       0.003         0.144         0.039
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
Hydro                           8
  RMPA  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2692.   0.
  15.30  0.00  0.00     3767.      3826.      7592.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  RMPA  CC   0822   000000 00              GAS      0.03  0.00  0.00  1281.   0.
  13.90  1.03  1.03      532.        77.       609.     4.04     0.59     4.63
   0.063    0.009    0.072       0.000       0.000         0.246         0.067
IGCC                           10
Turbine                        11
Biomass                        12
  RMPA  BIOMS00  53 000000 00              B1-: 0.6 0.02  0.08  0.57     1.   0.
  44.80  5.36  5.36        4.         3.         7.     0.03     0.02     0.05
   0.000    0.000    0.001       0.002       0.000         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  RMPA  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     1.   0.
  78.60 10.48 10.48        4.         3.         8.     0.06     0.05     0.11
   0.008    0.006    0.013       0.000       0.000         0.000         0.000
Wind                           15
  RMPA  WIND 00     000000 00              NONE     0.00  0.00 71.00   270.   0.
  26.40  0.00  0.00      648.       363.      1011.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
  RMPA  SOLAR00     000000 00              NONE     0.00  0.00 71.00     3.   0.
  47.00  0.00  0.00        5.         3.         7.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other               18
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
Cgn_Oil                        24
Cgn_Other                      25
  RMPA  CGBIO00  53 000000 00              B1-: 0.6 0.02  0.08  0.57     7.   0.
  44.80  5.36  5.36       30.        18.        48.     0.24     0.14     0.38
   0.002    0.001    0.004       0.015       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
```

Rep.Coal-CC	34
Rep.O/G-CC	35
Rep.Coal-IGCC	36
Ret.Scrubber	37
Ret.ExistSCR & Scrub	38
Ret.ExistSNCR & Scrub	39
Ret.SCR	40
Ret.ExistScrub & SCR	41
Ret.SNCR	42
Ret.ExistScrub & SNCR	43
Ret.SCR+Scrb	44
Ret.SNCR+Scrub	45
Ret.Gas Reburn	46
Ret.ExistScrub+GasR	47
Ret.GasReburn+Scrub	48
Ret.ACI	49
Ret.ExistScrub&ACI	50
Ret.ExistSCR&ACI	51
Ret.ExistSNCR&ACI	52
Ret.ACI & SCR	53
Ret.ExistScrub&ACI&SCR	54
Ret.ACI & SNCR	55
Ret.ExistScrub&ACI&SNCR	56
Ret.ACI & Srub	57
Ret.ExistSCR&ACI&Scrub	58
Ret.ExistSNCR&ACI&Scrub	59
Ret.ExistSNCR&ExistScrub&ACI	60
Ret.ExistSCR&ExistScrub&ACI	61
Ret.ExistNOx&ExistScrub&ACI	62
Ret.SCR & Scrub & ACI	63
Ret.SNCR & Scrub & ACI	64
Ret.O/G SCR	65
Ret.O/G SNCR	66
Ret.Nuclear (age 30+10 yrs)	67
Ret.Nuclear (age 40+20 yrs)	68
Ret. Biomass Cofiring	69
CT Early Retirement	70
CC Early Retirement	71
O/G Early Retirement	72
Coal Early Retirement	73
Nuke Early Retirement	74

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation reported in BBtu

---

Year: 2005, Region: NWPE (Emissions By Plant)

	NOx		SO2	MER	CO2	Carbon
	Generation				Trillion	
Emission		Emission	Emission	Emission	Emission	Emission
				(lb/MBtu)	(lb/TBtu)	(MW) $
/KWyr VOM Mill/KWh	(GWh)			(Btu)		
(1000 Tons)		(1000 Tons)	(Tons)	(Mil Tonnes)	(Mil Tonnes)	
Unit			Fuel	NOx	SO2 MERCURY	Cap. Cap
. FO&M WINT. SUMM.	WINTER	SUMMER	Total	WINTER	SUMMER	Total
WINTER SUMMER	Total	Total	Total	Total	Total	

```
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  NWPE  TSABS0841352020104 01              BD1: 5.1 0.40  0.15  3.24  1580.   0.
  42.70  2.94  2.94     5725.       832.      6557.    59.17     8.60    67.77
  11.834    1.719   13.553       5.083       0.110         6.311         1.721
  NWPE  TSXBS0841332020103 01              BD1: 5.1 0.40  0.12  1.72  1250.   0.
  36.30  2.94  2.94     5188.      4120.      9308.    51.36    40.79    92.15
  10.272    8.158   18.430       5.529       0.079         8.581         2.340
  NWPE  TSXBS0841402020103 01              BE1: 6.1 0.43  0.25  2.07  2410.   0.
  42.30  2.94  2.94        0.        57.        57.     0.00     0.57     0.57
   0.000    0.124    0.124       0.072       0.001         0.053         0.015
  NWPE  TSXBS0841402020103 01              BD1: 5.1 0.43  0.17  1.72  2410.   0.
  42.30  2.94  2.94    10002.      7831.     17833.    99.89    78.21   178.10
  21.576   16.894   38.469      15.227       0.154        16.585         4.523
  NWPE  TSXBS0841332020303 01              BD1: 5.1 0.46  0.03  0.15  2440.   0.
  35.60  2.94  2.94    10126.      8043.     18169.   100.04    79.45   179.49
  22.859   18.155   41.014       3.096       0.014        16.715         4.559
  NWPE  TSXBS0841362020304 01              BD1: 5.1 0.28  0.11  0.25   274.   0.
  35.60  2.94  2.94     1137.       757.      1894.    11.38     7.57    18.96
   1.594    1.060    2.654       1.066       0.002         1.765         0.481
  NWPE  TSXSS0741322020703 01              SE1: 5.5 0.40  0.08  3.87   700.   0.
  35.60  2.94  2.94     2905.      2307.      5212.    30.36    24.11    54.46
   6.071    4.822   10.893       2.059       0.105         5.255         1.433
  NWPE  TSXSS0742322020703 01              SD1: 4.4 0.40  0.13  3.08  1360.   0.
  36.60  2.94  2.94     5644.      4483.     10127.    62.13    49.35   111.48
  12.426    9.869   22.295       7.101       0.172        10.755         2.933
  NWPEWYTSZLS0841322020703 01              SD1: 4.4 0.40  0.17  3.08   330.   0.
  42.70  2.94  2.94     1370.      1088.      2457.    14.38    11.42    25.80
   2.876    2.284    5.160       2.167       0.040         2.489         0.679
  NWPEWYTSZLS0842322020104 01              SD1: 4.4 0.50  0.19  2.86   335.   0.
  35.60  2.94  2.94     1390.      1104.      2495.    16.24    12.90    29.14
   4.060    3.224    7.284       2.815       0.042         2.811         0.767
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  NWPE  TCOLU0811332050710 01              BB1: 3.4 0.44  0.53  3.41     8.   0.
  32.00  1.54  1.54       33.        26.        60.     0.35     0.27     0.62
   0.076    0.061    0.137       0.163       0.001         0.058         0.016
  NWPE  TCOLU0831332050710 01              BB1: 3.4 0.44  1.00  3.41    50.   0.
  11.70  1.54  1.54      208.       165.       372.     2.16     1.71     3.87
   0.478    0.380    0.858       1.936       0.007         0.361         0.098
  NWPE  TSABU0832332020110 01              BB1: 3.4 0.40  0.78  2.18    70.   0.
  32.00  1.54  1.54      291.       231.       521.     3.25     2.58     5.84
   0.651    0.517    1.168       2.274       0.006         0.544         0.148
  NWPE  TSABU0841332020110 01              BB1: 3.4 0.40  0.78  2.18   105.   0.
  32.00  1.54  1.54      436.       346.       782.     4.58     3.63     8.21
   0.915    0.727    1.642       3.194       0.009         0.764         0.208
  NWPE  TSABU0841352020310 01              BB1: 3.4 0.31  0.68  0.38   258.   0.
  17.40  1.54  1.54     1071.       850.      1921.    10.76     8.54    19.30
   1.667    1.324    2.992       6.534       0.004         1.797         0.490
  NWPE  TSASU0742322020110 01              SB1: 4.5 0.40  1.00  4.41   156.   0.
  26.40  1.54  1.54      647.       514.      1162.     7.13     5.66    12.79
   1.426    1.132    2.558       6.395       0.028         1.234         0.337
  NWPE  TSASU0841322020110 01              SB1: 4.5 0.46  1.00  4.41   106.   0.
  32.00  1.54  1.54      440.       349.       789.     4.66     3.70     8.37
   1.073    0.852    1.924       4.183       0.018         0.807         0.220
  NWPE  TSASU0842322020110 01              SB1: 4.5 0.61  1.00  4.41   336.   0.
  32.00  1.54  1.54     1394.      1108.      2502.    15.01    11.92    26.93
   4.585    3.642    8.227      13.464       0.059         2.598         0.709
  NWPE  TSBBU0841332020110 01              BB1: 3.4 0.40  1.00  2.18   425.   0.
  26.40  1.54  1.54     1764.      1401.      3165.    17.11    13.59    30.70
   3.422    2.718    6.139      15.349       0.033         2.859         0.780
  NWPE  TSXBU0841402020110 01              BB2: 4.1 0.40  0.30  2.62   370.   0.
  28.90  1.54  1.54     1536.      1220.      2755.    15.58    12.37    27.95
   3.115    2.474    5.589       4.192       0.037         2.602         0.710
Oil/Gas Steam                  5
```

```
Oil/Gas Steam_Nox              6
Nuclear                        7
Hydro                          8
  NWPE  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  1758.   0.
  15.20  0.00  0.00     2460.      2498.      4958.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  NWPE  CC   0722   000000 00              GAS      0.02  0.00  0.00   240.   0.
  13.90  0.00  1.03        0.        41.        41.     0.00     0.31     0.31
   0.000    0.003    0.003       0.000       0.000         0.016         0.004
IGCC                          10
  NWPE  IGCC 0831402050710 00              BE1: 6.1 0.06  0.00  0.30   100.   0.
  31.40  1.00  1.00      433.       335.       768.     3.15     2.44     5.59
   0.095    0.073    0.168       0.000       0.001         0.520         0.142
Turbine                       11
  NWPE  CT   0811   000000 00              GAS      0.13  0.00  0.00    14.   0.
   2.80  0.00  1.03        0.         2.         2.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
Biomass                       12
  NWPE  BIOMS00  52 000000 00              B1-: 0.6 0.02  0.08  0.57     5.   0.
  44.80  5.36  5.36       22.        13.        34.     0.17     0.10     0.27
   0.002    0.001    0.003       0.011       0.000         0.000         0.000
Geothermal                    13
  NWPE  GEO  00     000000 00              GEOTH    0.00  0.00  3.65   241.   0.
  87.40  0.00  0.00     1026.       811.      1837.    32.60    25.77    58.37
   0.000    0.000    0.000       0.000       0.106         0.000         0.000
Landfill Gas                  14
Wind                          15
  NWPE  WIND 00     000000 00              NONE     0.00  0.00 71.00   138.   0.
  26.40  0.00  0.00       62.        35.        97.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
  NWPE  SOLAR00     000000 00              NONE     0.00  0.00 71.00    24.   0.
  47.00  0.00  0.00       38.        20.        59.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other              18
Fossil_Other                  19
  NWPE  WASTE072    000000 00              WASTE    0.70  0.01 10.30    41.   0.
 103.60  0.00  0.00      183.       140.       323.     2.02     1.54     3.56
   0.706    0.538    1.244       0.012       0.018         0.000         0.000
Pump Storage                  20
Int. Imports                  21
Cgn_Coal                      22
  NWPE  CGCOU0731322050710 01              SB1: 4.5 0.36  1.00  4.55    55.   0.
  11.70  1.54  1.54      223.       180.       402.     1.81     1.46     3.28
   0.325    0.263    0.588       1.638       0.007         0.316         0.086
Cgn_Gas                       23
  NWPE  CGCC 0811   000000 00              GAS      0.15  0.00  0.00    10.   0.
  13.90  1.03  1.03       34.        26.        59.     0.22     0.17     0.38
   0.016    0.012    0.028       0.000       0.000         0.020         0.006
Cgn_Oil                       24
Cgn_Other                     25
  NWPE  CGOTH00     000000 00              NONE     0.00  0.00  0.00    10.   0.
 103.60  0.00  0.00       43.        33.        77.     0.18     0.14     0.32
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                26
NonCG IPP_Gas                 27
NonCG IPP_Other               28
Blr_Coal                      29
Blr_Gas                       30
Blr_Oil                       31
Blr_Other                     32
SteamOnly Cogen               33
Rep.Coal-CC                   34
```

Rep.O/G-CC	35
Rep.Coal-IGCC	36
Ret.Scrubber	37
Ret.ExistSCR & Scrub	38
Ret.ExistSNCR & Scrub	39
Ret.SCR	40
Ret.ExistScrub & SCR	41
Ret.SNCR	42
Ret.ExistScrub & SNCR	43
Ret.SCR+Scrb	44
Ret.SNCR+Scrub	45
Ret.Gas Reburn	46
Ret.ExistScrub+GasR	47
Ret.GasReburn+Scrub	48
Ret.ACI	49
Ret.ExistScrub&ACI	50
Ret.ExistSCR&ACI	51
Ret.ExistSNCR&ACI	52
Ret.ACI & SCR	53
Ret.ExistScrub&ACI&SCR	54
Ret.ACI & SNCR	55
Ret.ExistScrub&ACI&SNCR	56
Ret.ACI & Srub	57
Ret.ExistSCR&ACI&Scrub	58
Ret.ExistSNCR&ACI&Scrub	59
Ret.ExistSNCR&ExistScrub&ACI	60
Ret.ExistSCR&ExistScrub&ACI	61
Ret.ExistNOx&ExistScrub&ACI	62
Ret.SCR & Scrub & ACI	63
Ret.SNCR & Scrub & ACI	64
Ret.O/G SCR	65
Ret.O/G SNCR	66
Ret.Nuclear (age 30+10 yrs)	67
Ret.Nuclear (age 40+20 yrs)	68
Ret. Biomass Cofiring	69
CT Early Retirement	70
CC Early Retirement	71
O/G Early Retirement	72
Coal Early Retirement	73
Nuke Early Retirement	74

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu

Year: 2005, Region: MECS (Emissions By Plant Type)

	Generation			Trillion			Emission			NOx Emission			SO2 Emission			MER Emission			CO2 Emission			Carbon Emission		
	(GWh)			(Btu)			(1000 Tons)			(1000 Tons)			(Tons)			(Mil Tonnes)			(Mil Tonnes)					
	WINTER Total	SUMMER Total	Total	WINTER Total	SUMMER Total	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total
Total Scrubbed Coal_NOx 1	83.	66.	149.	0.86	0.69	1.55	0.259	0.134																

0.393 0.258 0.000 0.144 0.039
Total Scrubbed Coal 2
444. 285. 729. 5.00 3.22 8.22 0.781 0.501
1.282 0.377 0.009 0.766 0.209
Total Unscrubbed Coal_NOx 3
12533. 9954. 22488. 115.39 91.65 207.04 20.489 1.725
22.213 103.521 0.456 19.970 5.446
Total Unscrubbed Coal 4
26614. 18165. 44779. 259.67 177.12 436.79 44.504 29.875
74.380 203.017 0.773 41.411 11.294
Total Oil/Gas Steam 5
1053. 570. 1623. 10.10 5.46 15.56 1.005 0.544
1.548 0.000 0.000 0.826 0.225
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
8196. 5483. 13679. 96.43 66.99 163.42 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
618. 395. 1013. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
235. 750. 984. 1.76 5.62 7.38 0.018 0.056
0.074 0.000 0.000 0.392 0.107
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
0. 2. 2. 0.00 0.01 0.01 0.000 0.001
0.001 0.000 0.000 0.001 0.000
Total Biomass 12
698. 539. 1237. 6.44 4.97 11.41 0.064 0.050
0.114 0.456 0.003 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
22. 17. 39. 0.31 0.23 0.54 0.038 0.029
0.066 0.000 0.000 0.000 0.000
Total Wind 15
2. 1. 2. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
145. 115. 260. 1.60 1.26 2.86 0.000 0.000
0.000 0.000 0.046 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
387. 279. 666. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
6553. 4730. 11283. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
186. 115. 302. 1.94 1.20 3.14 0.392 0.243
0.634 1.570 0.006 0.292 0.080
Total Cgn_Gas 23

496. 514. 1010. 3.43 3.67 7.10 0.308 0.270
0.579 0.000 0.000 0.377 0.103
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
316. 244. 561. 1.68 1.30 2.98 0.007 0.005
0.012 0.050 0.062 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
3279. 2604. 5883. 30.52 24.24 54.76 8.622 0.679
9.301 27.381 0.072 5.100 1.391
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MECS
   61860.     44829.    106688.   535.13   387.64   922.77    76.487   34.111  1
10.597     336.629       1.428        69.277        18.894
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: ECAO     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
   40273.     31882.     72155.   396.73   313.83   710.56    98.071   10.463  1
08.534      85.296       1.013        66.169        18.046
Total Scrubbed Coal                 2
   31854.     24755.     56609.   320.82   249.00   569.83    63.442   48.623  1
12.065     159.451       0.926        53.064        14.472
Total Unscrubbed Coal_NOx           3
   57088.     43599.    100688.   532.94   406.71   939.65   140.174   20.917  1
61.091     657.325       2.000        87.705        23.920
Total Unscrubbed Coal               4
   78736.     46094.    124830.   768.78   447.84  1216.62   165.395   91.231  2
56.626     766.462       2.644       114.156        31.133
Total Oil/Gas Steam                 5
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox                6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                          7
   25904.     16792.     42696.   272.53   176.41   448.94     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                            8
    1806.      1169.      2974.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                   9
    2075.      2785.      4859.    15.59    20.91    36.50     0.172    0.222
 0.394       0.000       0.000         1.937         0.528
Total IGCC                            10
    1135.       877.      2013.     8.26     6.38    14.64     0.413    0.319
 0.732       0.000       0.006         1.364         0.372
Total Turbine                         11
       0.       162.       162.     0.00     1.76     1.76     0.000    0.072
 0.072       0.000       0.000         0.094         0.026
Total Biomass                         12
     364.       281.       645.     3.36     2.59     5.95     0.034    0.026
 0.060       0.238       0.002         0.000         0.000
Total Geothermal                      13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                    14
      54.        41.        95.     0.73     0.56     1.29     0.090    0.069
 0.159       0.000       0.000         0.000         0.000
Total Wind                            15
     164.        92.       256.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                           17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
     397.       313.       710.     4.36     3.44     7.81     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                    19
     268.       205.       473.     2.95     2.25     5.20     0.614    0.468
 1.082       0.000       0.000         0.000         0.000
Total Pump Storage                    20
     152.        37.       189.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
     577.       199.       777.     5.19     1.53     6.72     1.182    0.422
 1.603       3.054       0.009         0.625         0.171
Total Cgn_Gas                         23
     117.       274.       392.     0.88     2.07     2.95     0.009    0.022
 0.031       0.000       0.000         0.157         0.043
Total Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
      26.        20.        46.     0.22     0.17     0.39     0.002    0.002
 0.004       0.016       0.000         0.000         0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
    6530.      5186.     11717.    65.35    51.91   117.26    15.578    1.238
16.816       8.478       0.104        10.919         2.978
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
   32838.     26081.     58919.   308.98   245.40   554.38    93.183    7.419  1
00.602     323.127       1.102        51.847        14.140
Total Ret.ExistScrub & SCR           41
   23586.     18732.     42318.   231.16   183.59   414.75    58.499    5.086
63.586      69.210       0.552        38.623        10.534
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total ECAO
  303945.    219575.    523521.  2938.84  2116.36  5055.20   636.859  186.599  8
23.458    2072.657       8.358       426.660       116.362
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: ERCT     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
   25288.     20084.     45372.   271.46   215.60   487.07    42.088   33.427
75.516     146.685       1.250        47.443        12.939
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    9898.     10737.     20635.    97.63   108.13   205.76    15.044   16.517
31.561     156.811       0.651        19.795         5.399
Total Oil/Gas Steam                 5
       0.      9255.      9255.     0.00    91.57    91.57     0.000   14.882
14.882       0.000       0.000         4.860         1.325
Total Oil/Gas Steam_Nox             6
       0.      1324.      1324.     0.00    13.16    13.16     0.000    0.924
 0.924       0.000       0.000         0.699         0.191
Total Nuclear                       7
   21792.     17018.     38810.   227.89   177.79   405.68     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
     431.       365.       796.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Comb.Cycle Gas 9
62588. 52526. 115114. 469.72 395.09 864.81 4.754 4.208
8.963 0.000 0.000 45.896 12.517
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
422. 928. 1350. 4.95 10.72 15.68 0.237 0.491
0.727 0.000 0.000 0.832 0.227
Total Biomass 12
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
300. 229. 528. 4.09 3.12 7.21 0.503 0.384
0.887 0.000 0.000 0.000 0.000
Total Wind 15
1465. 823. 2288. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
44. 35. 79. 0.48 0.38 0.87 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
9. 7. 16. 0.10 0.08 0.17 0.020 0.016
0.036 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Gas 23
7185. 11686. 18871. 55.33 89.74 145.08 1.305 2.306
3.610 0.000 0.000 7.699 2.100
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
41. 252. 292. 0.25 1.50 1.75 0.045 0.307
0.352 0.000 0.018 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
    6789.       6611.      13400.    68.94    67.08   136.02     1.729    1.684
 3.414      59.740       0.258        13.123         3.579
Total Ret.ExistScrub & SCR           41
    7792.       6652.      14443.    80.54    68.69   149.23     2.013    1.717
 3.731      29.251       0.356        14.552         3.969
Total Ret.SNCR                       42
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                 45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret. Biomass Cofiring          69
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CT Early Retirement            70
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CC Early Retirement            71
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total O/G Early Retirement           72
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Coal Early Retirement          73
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

Total Nuke Early Retirement 74
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total ERCT
144043. 138531. 282574. 1281.39 1242.67 2524.06 67.739 76.862 1
44.601 392.487 2.533 154.898 42.245

(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2005, Region: MACE (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
6395. 4919. 11315. 60.86 46.72 107.57 18.957 2.620
21.577 14.464 0.666 10.017 2.732
Total Scrubbed Coal 2
2411. 1906. 4318. 24.06 19.03 43.09 3.730 2.949
6.679 4.460 0.139 4.013 1.094
Total Unscrubbed Coal_NOx 3
4950. 3582. 8532. 50.25 36.25 86.50 9.047 3.691
12.738 47.573 0.149 8.055 2.197
Total Unscrubbed Coal 4
977. 610. 1587. 9.96 6.24 16.19 1.934 1.202
3.136 8.907 0.022 1.508 0.411
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
39447. 28692. 68139. 419.38 305.15 724.53 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
2346. 1770. 4115. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
4600. 3676. 8276. 35.51 28.75 64.25 0.682 0.582
1.264 0.000 0.000 3.410 0.930
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
0. 1. 1. 0.00 0.01 0.01 0.000 0.001
0.001 0.000 0.000 0.001 0.000
Total Biomass 12
35. 27. 61. 0.28 0.21 0.49 0.003 0.002

0.005 0.020 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
107. 82. 189. 1.35 1.03 2.37 0.166 0.126
0.292 0.000 0.000 0.000 0.000
Total Wind 15
20. 11. 31. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
3. 8. 11. 0.03 0.06 0.08 0.005 0.011
0.017 0.000 0.000 0.004 0.001
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
1133. 893. 2026. 12.46 9.83 22.29 0.000 0.000
0.000 0.000 0.791 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
276. 199. 474. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
666. 538. 1204. 5.59 4.51 10.10 1.356 1.095
2.451 5.554 0.026 0.940 0.256
Total Cgn_Gas 23
2323. 2708. 5031. 16.23 20.04 36.27 0.530 0.802
1.332 0.000 0.000 1.925 0.525
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MACE
   65689.     49623.    115312.   635.94   477.81  1113.75    36.410   13.080
49.490      80.978       1.793        29.873         8.147
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
```

neration

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: MACW     (Emissions By Plant Type)
             Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
    4856.      3856.      8712.    45.81    36.39    82.20     7.033    0.556
 7.589       6.936       0.172         7.655         2.088
Total Scrubbed Coal                  2
     652.       451.      1102.     6.82     4.71    11.53     1.552    1.068
 2.620       1.571       0.026         1.074         0.293
Total Unscrubbed Coal_NOx            3
   11730.      9028.     20758.   108.39    83.21   191.60    26.611    2.034
28.644     208.767       1.114        17.842         4.866
Total Unscrubbed Coal                4
    8441.      4459.     12900.    81.15    42.49   123.64    16.393    8.444
24.836      69.273       0.226        11.514         3.140
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   14951.      9693.     24644.   159.13   103.35   262.48     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    1512.       632.      2144.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    1089.      1385.      2474.     8.17    10.38    18.55     0.082    0.104
 0.186       0.000       0.000         0.985         0.269
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Biomass                       12
      74.        57.       131.     0.68     0.53     1.20     0.007    0.005
 0.012       0.048       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       4.         3.         8.     0.06     0.05     0.11     0.008    0.006
 0.013       0.000       0.000         0.000         0.000
Total Wind                          15
      17.        10.        27.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
     525.       414.       938.     5.77     4.55    10.32     0.000    0.000
 0.000       0.000       0.336         0.000         0.000
Total Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
     243.        58.       301.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
    2158.      1383.      3541.    19.85    12.24    32.09     3.980    2.295
 6.275      13.980       0.083         2.988         0.815
Total Cgn_Gas                        23
       0.        55.        55.     0.00     0.51     0.51     0.000    0.046
 0.046       0.000       0.000         0.027         0.007
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
     156.       121.       277.     0.83     0.64     1.48     0.004    0.003
 0.007       0.027       0.007         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
7055. 5603. 12659. 67.03 53.23 120.26 14.947 1.331
16.278 132.285 0.709 11.199 3.054
Total Ret.ExistScrub & SCR 41
7055. 5603. 12659. 64.84 51.50 116.33 14.329 1.287
15.617 9.102 0.345 10.833 2.955
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MACW
   60518.     42811.    103329.   568.52   403.80   972.31    84.943   17.180  1
02.123     441.988       3.018        64.117        17.486
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: MACS     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
```

	Emission (GWh)	Emission (1000 Tons)	Emission (Tons)	Emission (Btu)	Emission (Mil Tonnes)	Emission (Mil Tonnes)	(1000 Tons)	
	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
Total Scrubbed Coal_NOx	1							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
Total Scrubbed Coal	2							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
Total Unscrubbed Coal_NOx	3							
	2447.	1700.	4147.	23.78	16.40	40.18	7.579	2.263
	9.842	26.439	0.046	3.742	1.020			
Total Unscrubbed Coal	4							
	2258.	1794.	4052.	21.43	17.02	38.44	3.988	3.167
	7.155	33.840	0.146	3.580	0.976			
Total Oil/Gas Steam	5							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
Total Oil/Gas Steam_Nox	6							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
Total Nuclear	7							
	8494.	5572.	14066.	92.30	60.55	152.85	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
Total Hydro	8							
	43.	16.	59.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
Total Comb.Cycle Gas	9							
	95.	73.	169.	0.81	0.62	1.43	0.032	0.025
	0.057	0.000	0.000	0.076	0.021			
Total IGCC	10							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
Total Turbine	11							
	193.	463.	655.	2.07	5.58	7.65	0.107	0.298
	0.405	0.000	0.000	0.406	0.111			
Total Biomass	12							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
Total Geothermal	13							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
Total Landfill Gas	14							
	18.	14.	32.	0.24	0.19	0.43	0.030	0.023
	0.053	0.000	0.000	0.000	0.000			
Total Wind	15							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
Total Fuel Cell	16							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
Total Solar	17							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
Total Non Fossil_Other	18							
	242.	191.	434.	2.67	2.10	4.77	0.000	0.000
	0.000	0.000	0.169	0.000	0.000			
Total Fossil_Other	19							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			

```
Total Pump Storage                    20
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Int. Imports                    21
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Cgn_Coal                        22
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Cgn_Gas                         23
     169.       143.       312.      1.66      1.40      3.06      0.066     0.056
 0.123       0.000       0.000         0.163          0.044
Total Cgn_Oil                         24
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Cgn_Other                       25
     234.       181.       415.      0.98      0.76      1.74      0.000     0.000
 0.000       0.000       0.062         0.000          0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total NonCG IPP_Gas                   27
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total NonCG IPP_Other                 28
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Blr_Coal                        29
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Blr_Oil                         31
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Blr_Other                       32
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total SteamOnly Cogen                 33
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Rep.Coal-CC                     34
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Rep.O/G-CC                      35
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Rep.Coal-IGCC                   36
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.Scrubber                    37
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistSCR & Scrub            38
    5245.      4166.      9411.     53.70     42.65     96.34     12.270     0.981
13.251       7.226       0.208         8.972          2.447
Total Ret.ExistSNCR & Scrub           39
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.SCR                         40
    7665.      5100.     12765.     69.93     46.52    116.46     22.518     1.489
24.007     128.102       0.431        10.845          2.958
Total Ret.ExistScrub & SCR            41
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
```

0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MACS
   27104.     19411.     46515.   269.57   193.79   463.36    46.591    8.301
54.893     195.607       1.061        27.783         7.577
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: WUMS     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Scrubbed Coal 2
765. 608. 1372. 8.18 6.50 14.68 1.976 1.569
3.545 5.710 0.015 1.367 0.373
Total Unscrubbed Coal_NOx 3
285. 226. 511. 3.06 2.43 5.49 0.685 0.544
1.230 1.878 0.012 0.530 0.144
Total Unscrubbed Coal 4
25868. 20680. 46548. 267.07 213.96 481.03 45.022 36.248
81.270 195.964 1.115 45.928 12.526
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
6577. 5013. 11590. 69.75 53.40 123.15 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
1007. 676. 1683. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
419. 158. 577. 3.56 1.34 4.91 0.214 0.081
0.294 0.000 0.000 0.260 0.071
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
491. 450. 941. 5.37 4.97 10.34 0.215 0.202
0.417 0.000 0.000 0.549 0.150
Total Biomass 12
52. 40. 92. 0.42 0.32 0.74 0.004 0.003
0.007 0.030 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
63. 48. 110. 0.85 0.65 1.51 0.105 0.080
0.185 0.000 0.000 0.000 0.000
Total Wind 15
20. 11. 32. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
61. 49. 110. 0.51 0.41 0.92 0.094 0.076
0.171 0.459 0.003 0.089 0.024
Total Cgn_Gas 23
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Gas Reburn                 46
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                        49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI               51
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

```
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total WUMS
   35608.     27960.     63568.   358.77   283.97   642.75    48.316   38.803
87.119     204.040       1.145        48.722        13.288
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: MANO     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
     249.       198.       447.     2.49     1.97     4.46     0.426    0.204
 0.630       0.395       0.001         0.415         0.113
Total Scrubbed Coal                 2
    2307.      1586.      3894.    24.88    17.14    42.02     6.023    4.047
10.070      11.840       0.072         3.913         1.067
Total Unscrubbed Coal_NOx           3
    2690.      1980.      4670.    26.96    19.89    46.85     8.233    1.600
 9.833      20.274       0.098         4.429         1.208
Total Unscrubbed Coal               4
   58846.     36917.     95763.   590.04   369.96   960.00   114.220   62.691  1
76.912     468.061       2.377        91.788        25.033
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   59814.     44583.    104397.   631.44   470.20  1101.65     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    1079.       747.      1826.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
     566.      1722.      2288.     4.25    12.93    17.17     0.042    0.131
 0.173       0.000       0.000         0.911         0.249
Total IGCC                          10
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       0.        917.        917.     0.00    10.00    10.00     0.000    0.411
 0.411       0.000       0.000         0.531         0.145
Total Biomass                       12
       4.          3.          8.     0.03     0.03     0.06     0.000    0.000
 0.001       0.002       0.000         0.000         0.000
Total Geothermal                    13
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
     170.        130.        300.     2.32     1.77     4.09     0.285    0.218
 0.503       0.000       0.000         0.000         0.000
Total Wind                          15
      88.         49.        137.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
      93.         73.        166.     1.02     0.80     1.82     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       9.          7.         16.     0.10     0.08     0.17     0.020    0.016
 0.036       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.        142.        142.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
       0.         26.         26.     0.00     0.20     0.20     0.000    0.003
 0.003       0.000       0.000         0.010         0.003
Total Cgn_Oil                       24
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                26
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
     982.       830.      1812.     9.70     8.20    17.90     3.022    0.254
 3.276      15.003       0.030         1.667         0.455
Total Ret.ExistScrub & SCR           41
    1519.      1206.      2725.    15.22    12.09    27.30     4.763    0.381
 5.144       7.523       0.023         2.543         0.693
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MANO
  128416.     91117.    219533.  1308.44   925.25  2233.70   137.036   69.955  2
06.991     523.098       2.600       106.208        28.966
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: MAPP     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
   27332.     21416.     48748.   293.08   229.64   522.72    56.756   44.596  1
01.352      91.893       1.337        50.582        13.795
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
   44107.     34313.     78420.   463.61   360.94   824.54   100.085   80.807  1
80.892     382.335       2.019        79.065        21.563
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
   14337.     11391.     25728.   153.69   121.81   275.49     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
    5412.      4577.      9989.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                9
```

206. 570. 776. 1.57 4.35 5.92 0.023 0.072
0.095 0.000 0.000 0.314 0.086
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
0. 220. 220. 0.00 2.37 2.37 0.000 0.101
0.101 0.000 0.000 0.126 0.034
Total Biomass 12
644. 409. 1054. 5.22 3.31 8.53 0.052 0.033
0.085 0.341 0.002 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
49. 38. 87. 0.67 0.51 1.18 0.083 0.063
0.146 0.000 0.000 0.000 0.000
Total Wind 15
1443. 809. 2252. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
150. 118. 268. 1.65 1.30 2.95 0.000 0.000
0.000 0.000 0.105 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
1. 1. 2. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
312. 252. 563. 2.79 2.25 5.03 0.706 0.570
1.276 1.283 0.009 0.469 0.128
Total Cgn_Gas 23
0. 5. 5. 0.00 0.06 0.06 0.000 0.002
0.002 0.000 0.000 0.003 0.001
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
9. 7. 15. 0.04 0.03 0.06 0.000 0.000
0.000 0.000 0.002 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuke Early Retirement 74

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MAPP
   94002.     74124.    168126.   922.30   726.56  1648.86   157.704  126.245  2
83.949     475.852       3.475       130.559        35.607
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: UPNY     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
    3453.      2742.      6195.    31.97    25.39    57.35     6.764    0.533
 7.297       8.637       0.074         5.341         1.457
Total Scrubbed Coal                  2
     618.       491.      1109.     5.85     4.64    10.49     1.228    0.975
 2.203       0.629       0.020         0.977         0.266
Total Unscrubbed Coal_NOx            3
    1502.      1098.      2600.    14.92    10.85    25.77     2.718    1.275
 3.993      28.349       0.152         2.400         0.655
Total Unscrubbed Coal                4
    7159.      3838.     10997.    74.22    39.73   113.95    13.464    6.624
20.088     121.312       0.839        10.611         2.894
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   12669.     11132.     23800.   132.77   116.74   249.51     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
   15534.     10355.     25889.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Biomass                       12
      78.        60.       138.     0.72     0.56     1.28     0.007    0.006
 0.013       0.051       0.000         0.000         0.000
```

Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
27. 20. 47. 0.37 0.28 0.65 0.045 0.034
0.079 0.000 0.000 0.000 0.000
Total Wind 15
87. 49. 136. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
150. 118. 268. 1.65 1.30 2.95 0.000 0.000
0.000 0.000 0.105 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
8258. 5960. 14217. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
704. 568. 1273. 5.84 4.71 10.55 1.022 0.744
1.766 3.122 0.019 0.983 0.268
Total Cgn_Gas 23
0. 64. 64. 0.00 0.52 0.52 0.000 0.046
0.046 0.000 0.000 0.028 0.008
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
191. 147. 338. 2.55 1.97 4.52 0.000 0.000
0.000 0.000 0.160 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring          69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement            70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement            71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement           72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement          73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement          74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total UPNY
   50430.     36643.     87073.   270.84   206.70   477.54    25.249   10.237
35.486     162.100       1.369        20.339         5.547
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: DSNY     (Emissions By Plant Type)
             Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
    3063.      1791.      4854.    31.73    18.52    50.25     5.923    3.458
 9.382      25.634       0.083         4.679         1.276
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
    7419.      7060.     14479.    76.02    72.18   148.21     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    1237.       824.      2061.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    7861.      5900.     13761.    59.04    44.25   103.29     0.611    0.442
 1.054       0.000       0.000         5.482         1.495
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Wind                          15
      29.        16.        45.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Solar                           17
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
     361.        285.        646.     3.98     3.14     7.11     0.000    0.000
 0.000       0.000       0.252         0.000         0.000
Total Fossil_Other                    19
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                    20
       0.        149.        149.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                         23
     117.        126.        243.     1.10     1.19     2.29     0.103    0.111
 0.214       0.000       0.000         0.121         0.033
Total Cgn_Oil                         24
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
      30.         23.         54.     0.13     0.10     0.23     0.000    0.000
 0.000       0.000       0.008         0.000         0.000
Total NonCG IPP_Coal                  26
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                   27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                 28
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                        29
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                         30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                         31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                       32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                 33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                     34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                      35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                   36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                    37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub            38
```

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total DSNY
   20117.     16175.     36292.   172.00   139.37   311.37     6.638    4.012
10.649      25.634       0.344        10.283         2.804
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: NYC      (Emissions By Plant Type)
             Generation                    Trillion                  Emission
        Emission    Emission      Emission       Emission
```

```
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam                  5
    5621.      6174.     11796.    53.63    58.90   112.53     3.674    4.035
 7.708       0.000       0.000         5.972         1.629
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    1665.      1277.      2941.    13.38    10.26    23.64     0.704    0.540
 1.244       0.000       0.000         1.255         0.342
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
     106.        79.       186.     1.16     0.87     2.03     0.046    0.035
 0.081       0.000       0.000         0.108         0.029
Total Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Wind                          15
      27.        15.        41.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                        23
     212.       162.       374.     1.92     1.47     3.40     0.178    0.136
 0.314       0.000       0.000         0.180         0.049
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.SNCR                        42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR           43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                    44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                  45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                  46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR             47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub             48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI              50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI                51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI               52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                   53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR          54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                  55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR         56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                  57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub          58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub         59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI    60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI     61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI     62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI           63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NYC
    7631.       7707.      15338.    70.10    71.50   141.60     4.602    4.746
 9.347       0.000       0.000         7.515         2.049
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: LILC     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam                  5
    1015.      2361.      3376.    10.68    24.85    35.53     0.486    1.217
 1.703       0.000       0.000         1.886         0.514
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
     472.       407.       879.     3.76     3.39     7.15     0.121    0.140
 0.262       0.000       0.000         0.380         0.104
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
    1538.      1240.      2779.    17.02    13.92    30.94     0.711    0.605
 1.317       0.000       0.000         1.642         0.448
Total Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Wind                          15
      16.         9.        25.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
     604.       476.      1080.     6.64     5.24    11.88     0.000    0.000
 0.000       0.000       0.355         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
     510.       343.       853.     4.51     3.09     7.61     0.406    0.277
 0.683       0.000       0.000         0.404         0.110
```

Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                  46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR             47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub             48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                         49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI              50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI                51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI               52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                   53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR          54
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                  55
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR         56
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                  57
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub          58
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub         59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI    60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI     61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI     62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI           63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI          64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                     65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                    66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)     67
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total LILC
    4156.      4837.      8993.    42.61    50.50    93.11     1.724    2.240
 3.964       0.000       0.355         4.311         1.176
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: NENG     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
     324.       257.       581.     3.37     2.68     6.04     0.339    0.269
 0.607       0.453       0.019         0.563         0.153
Total Scrubbed Coal                 2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx           3
    3231.      2069.      5300.    32.33    20.45    52.78    10.596    1.508
12.104      53.110       0.285         4.915         1.341
Total Unscrubbed Coal               4
    2030.      1272.      3302.    19.11    11.90    31.01     3.220    2.171
 5.391      22.219       0.113         2.888         0.788
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Oil/Gas Steam_Nox                6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                          7
   19835.     14215.     34051.   200.38   143.60   343.98     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                            8
    3489.      1724.      5212.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                   9
   32985.     24740.     57726.   249.70   187.26   436.96     3.689    2.754
 6.443       0.000       0.000        23.189         6.324
Total IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                         11
      10.         7.        17.     0.10     0.07     0.17     0.006    0.004
 0.010       0.000       0.000         0.009         0.002
Total Biomass                         12
     962.       155.      1117.     8.82     1.42    10.24     0.088    0.014
 0.102       0.409       0.003         0.000         0.000
Total Geothermal                      13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                    14
      81.        61.       142.     1.10     0.84     1.94     0.135    0.103
 0.238       0.000       0.000         0.000         0.000
Total Wind                            15
      14.         8.        22.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                       16
       1.         1.         1.     0.01     0.00     0.01     0.001    0.001
 0.002       0.000       0.000         0.000         0.000
Total Solar                           17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
    2367.      1867.      4234.    26.04    20.53    46.57     0.000    0.000
 0.000       0.000       1.647         0.000         0.000
Total Fossil_Other                    19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                    20
       0.       186.       186.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
    5638.      4069.      9706.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
     824.       665.      1488.     7.62     6.15    13.77     1.072    0.865
 1.938       3.291       0.058         1.283         0.350
Total Cgn_Gas                         23
     233.       335.       568.     1.92     2.75     4.67     0.116    0.159
 0.275       0.000       0.000         0.248         0.068
Total Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
     429.       332.       761.     2.85     2.20     5.05     0.027    0.021
 0.047       0.189       0.010         0.000         0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                   27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                 28
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                        29
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                         30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                         31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                       32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                 33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                     34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                      35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                   36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                    37
     144.        115.        259.     1.42     1.13     2.55     0.168    0.133
 0.301       0.056       0.002         0.237         0.065
Total Ret.ExistSCR & Scrub            38
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub           39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                         40
    3407.       2706.       6114.    31.74    25.21    56.95     0.794    0.630
 1.424      42.715       0.229         5.304         1.446
Total Ret.ExistScrub & SCR            41
     273.        221.        494.     2.65     2.14     4.78     0.066    0.053
 0.120       0.359       0.004         0.445         0.121
Total Ret.SNCR                        42
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR           43
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                    44
     485.        385.        870.     4.77     3.79     8.56     0.119    0.095
 0.214       0.188       0.002         0.797         0.217
Total Ret.SNCR+Scrub                  45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                  46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR             47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub             48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                         49
```

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NENG
   76760.     55389.    132149.   593.91   432.13  1026.04    20.435    8.780
29.215     122.989       2.372        39.879        10.876
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: FRCC     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
    8931.      7093.     16024.    86.61    68.78   155.39    23.405   18.589
41.994      14.398       0.130        14.470         3.946
Total Scrubbed Coal                 2
   19286.     15317.     34603.   190.54   151.33   341.86    43.872   34.844
78.716     102.463       0.446        31.835         8.682
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
   10529.      8362.     18891.   100.19    79.58   179.77    22.195   17.628
39.823      89.886       0.214        16.741         4.566
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
   17948.     13845.     31794.   196.33   151.55   347.88     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
      83.        38.       121.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                9
   28325.     32651.     60976.   219.49   253.12   472.61     5.597    6.467
```

12.064 0.000 0.000 25.082 6.840
Total IGCC 10
1083. 837. 1921. 7.88 6.09 13.97 0.394 0.305
0.699 0.000 0.003 1.301 0.355
Total Turbine 11
0. 1626. 1626. 0.00 17.81 17.81 0.000 0.734
0.734 0.000 0.000 0.945 0.258
Total Biomass 12
234. 181. 415. 2.16 1.67 3.83 0.022 0.017
0.038 0.153 0.001 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
9. 7. 16. 0.12 0.09 0.22 0.015 0.011
0.026 0.000 0.000 0.000 0.000
Total Wind 15
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
1869. 1474. 3343. 20.56 16.21 36.77 0.000 0.000
0.000 0.000 1.120 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
2643. 2133. 4777. 26.06 21.03 47.10 5.955 4.806
10.762 23.548 0.097 4.386 1.196
Total Cgn_Gas 23
158. 482. 640. 1.37 4.30 5.67 0.096 0.301
0.398 0.000 0.000 0.301 0.082
Total Cgn_Oil 24
0. 17. 17. 0.00 0.14 0.14 0.000 0.021
0.021 0.000 0.000 0.008 0.002
Total Cgn_Other 25
360. 278. 638. 2.99 2.31 5.30 0.023 0.017
0.040 0.160 0.001 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Other                       32
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total SteamOnly Cogen                 33
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-CC                     34
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.O/G-CC                      35
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-IGCC                   36
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Scrubber                    37
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR & Scrub            38
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR & Scrub           39
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR                         40
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SCR            41
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR                        42
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SNCR           43
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR+Scrb                    44
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR+Scrub                  45
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Gas Reburn                  46
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR             47
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub             48
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                         49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI              50
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI                51
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI               52
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuke Early Retirement 74
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000

Total FRCC
   91458.     84342.    175800.   854.30   774.02  1628.32   101.575   83.741  1
85.316     230.608       2.010        95.069        25.928
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: VACA     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
   18838.     14961.     33799.   183.88   146.04   329.91    25.147    4.651
29.798      25.521       0.341        30.722         8.379
Total Scrubbed Coal                  2
    2743.      2179.      4922.    28.53    22.66    51.19     3.361    2.669
 6.030       5.882       0.052         4.767         1.300
Total Unscrubbed Coal_NOx            3
   34475.     26373.     60848.   327.97   250.28   578.25    69.959    9.463
79.422     403.405       0.965        53.848        14.686
Total Unscrubbed Coal                4
   37061.     23600.     60660.   360.52   226.64   587.16    71.250   43.487  1
14.737     400.555       1.032        54.678        14.912
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   66376.     52077.    118452.   679.04   533.20  1212.25     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    6437.      3139.      9575.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
     311.      1933.      2244.     2.33    15.24    17.57     0.023    0.436
 0.459       0.000       0.000         0.933         0.254
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       0.         5.         5.     0.00     0.05     0.05     0.000    0.002
 0.002       0.000       0.000         0.003         0.001
Total Biomass                       12
     204.       157.       361.     1.88     1.45     3.33     0.019    0.015
 0.033       0.133       0.001         0.000         0.000
Total Geothermal                    13
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                   14
     112.        85.       197.     1.53     1.16     2.69     0.188    0.143
 0.331       0.000       0.000         0.000         0.000
Total Wind                           15
      20.        11.        31.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                      16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
     617.       487.      1104.     6.79     5.35    12.14     0.000    0.000
 0.000       0.000       0.431         0.000         0.000
Total Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
    1816.      1410.      3226.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
    4557.      3551.      8107.    40.37    31.29    71.66     7.659    5.825
13.485      36.319       0.144         6.673         1.820
Total Cgn_Gas                        23
     225.       731.       957.     1.67     5.60     7.27     0.040    0.139
 0.179       0.000       0.000         0.386         0.105
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
     191.       147.       338.     1.44     1.11     2.55     0.013    0.010
 0.022       0.089       0.012         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
1121. 890. 2011. 11.07 8.79 19.86 3.133 0.251
3.383 2.801 0.026 1.850 0.504
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring          69
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement            70
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement            71
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement           72
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement          73
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement          74
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total VACA
  175102.    131736.    306838.  1647.02  1248.87  2895.89   180.790   67.092  2
47.882     874.706       3.004       153.859        41.962
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: TVA      (Emissions By Plant Type)
             Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
   24905.     19780.     44685.   243.93   193.74   437.67    77.047    6.779
83.826      53.234       0.462        40.757        11.116
Total Scrubbed Coal                  2
     515.       409.       923.     5.48     4.35     9.83     1.222    0.971
 2.192       2.950       0.002         0.916         0.250
Total Unscrubbed Coal_NOx            3
   12687.     10076.     22763.   120.47    95.68   216.16    29.594    2.352
31.946     143.571       0.404        20.129         5.490
Total Unscrubbed Coal                4
   21863.     14118.     35981.   222.79   142.15   364.94    43.679   27.910
71.590     201.722       0.539        34.108         9.302
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   27738.     20544.     48282.   288.40   213.35   501.75     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
   11469.      6255.     17724.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    1209.      2820.      4029.     9.07    21.15    30.22     0.091    0.211
 0.302       0.000       0.000         1.604         0.437
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Biomass                       12
       4.         3.         8.     0.04     0.03     0.07     0.000    0.000
 0.001       0.003       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       9.         7.        16.     0.12     0.09     0.22     0.015    0.011
 0.026       0.000       0.000         0.000         0.000
Total Wind                          15
       2.         1.         3.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
      53.        42.        95.     0.58     0.46     1.04     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
       0.       385.       385.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                        23
     289.       664.       953.     2.16     4.98     7.15     0.022    0.050
 0.071       0.000       0.000         0.379         0.103
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
    1897.      1507.      3404.    19.20    15.25    34.46     4.302    0.343
```

4.645 4.307 0.032 3.209 0.875
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total TVA
  102641.     76610.    179251.   912.26   691.23  1603.49   155.972   38.628  1
94.599     405.787       1.439       101.101        27.573
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: SOU      (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
```

	(GWh)			(Btu)			(1000 Tons)	
	(1000 Tons)		(Tons)	(Mil Tonnes)		(Mil Tonnes)		
	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
Total Scrubbed Coal_NOx	1							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Scrubbed Coal	2							
	4042.	3210.	7253.	42.90	34.07	76.96	8.425	6.691
	15.116	17.391	0.149	7.167		1.955		
Total Unscrubbed Coal_NOx	3							
	28196.	22394.	50590.	267.16	212.18	479.34	55.227	4.370
	59.597	304.837	0.742	44.638		12.174		
Total Unscrubbed Coal	4							
	51901.	39133.	91034.	508.15	380.56	888.72	95.792	71.291 1
	67.083	516.190	1.619	83.141		22.675		
Total Oil/Gas Steam	5							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Oil/Gas Steam_Nox	6							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Nuclear	7							
	25980.	20072.	46052.	283.85	219.39	503.25	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Hydro	8							
	6138.	2706.	8844.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Comb.Cycle Gas	9							
	14138.	21468.	35607.	106.13	161.19	267.32	1.095	1.678
	2.773	0.000	0.000	14.187		3.869		
Total IGCC	10							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Turbine	11							
	0.	2.	2.	0.00	0.01	0.01	0.000	0.001
	0.001	0.000	0.000	0.001		0.000		
Total Biomass	12							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Geothermal	13							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Landfill Gas	14							
	40.	31.	71.	0.55	0.42	0.97	0.068	0.052
	0.119	0.000	0.000	0.000		0.000		
Total Wind	15							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Fuel Cell	16							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Solar	17							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Non Fossil_Other	18							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Fossil_Other	19							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Pump Storage	20							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
       4.          3.          7.     0.04     0.03     0.07     0.007    0.006
 0.013       0.036       0.000         0.006         0.002
Total Cgn_Gas                         23
    1166.       1460.       2626.     8.80    11.12    19.92     0.109    0.161
 0.270       0.000       0.000         1.057         0.288
Total Cgn_Oil                         24
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
      22.         17.         38.     0.19     0.14     0.33     0.002    0.001
 0.003       0.013       0.000         0.000         0.000
Total NonCG IPP_Coal                  26
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                   27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                 28
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                        29
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                         30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                         31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                       32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                 33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                     34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                      35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                   36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                    37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub            38
    2994.       2378.       5373.    29.21    23.20    52.41     5.885    0.464
 6.349       3.930       0.114         4.880         1.331
Total Ret.ExistSNCR & Scrub           39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                         40
    5883.       4672.      10555.    56.16    44.60   100.76    16.570    1.322
17.892      52.735       0.239         9.563         2.608
Total Ret.ExistScrub & SCR            41
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                        42
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
    3728.      2961.      6689.    37.07    29.44    66.51     9.362    0.744
10.107       4.988       0.136         6.193         1.689
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total SOU
  144233.    120508.    264740.  1340.19  1116.36  2456.55   192.542   86.781  2
79.323     900.120       2.998       170.832        46.591
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: ENTG     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
    2781.      2208.      4989.    27.95    22.19    50.14     4.038    3.207
```

```
 7.245       5.616       0.136         4.837         1.319
Total Unscrubbed Coal_NOx            3
    4814.      3824.      8638.    48.38    38.43    86.81    17.684    1.403
19.086      20.400       0.114         8.084         2.205
Total Unscrubbed Coal                4
   24538.     19998.     44536.   252.15   205.69   457.84    42.390   34.652
77.042     177.116       1.378        44.029        12.008
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   23670.     17582.     41252.   262.52   195.14   457.65     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
     646.       474.      1120.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    4830.     13032.     17862.    36.23    97.74   133.96     0.362    0.977
 1.340       0.000       0.000         7.110         1.939
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Biomass                       12
      43.        33.        77.     0.40     0.31     0.71     0.004    0.003
 0.007       0.028       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
      27.        20.        47.     0.37     0.28     0.65     0.045    0.034
 0.079       0.000       0.000         0.000         0.000
Total Wind                          15
      57.        32.        88.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
     137.       108.       244.     1.50     1.19     2.69     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
       0.      5210.      5210.     0.00    39.08    39.08     0.000    0.393
 0.393       0.000       0.000         2.074         0.566
Total Cgn_Oil                       24
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
     795.       607.      1402.     4.81     3.67     8.49     0.942    0.719
 1.661       0.021       0.083         0.000         0.000
Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other               28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                       31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                  37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                       40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total ENTG
   62338.     63128.    125466.   634.30   603.71  1238.01    65.466   41.389  1
06.854     203.181       1.711        66.134        18.036
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: SPPN     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
    4524.      3593.      8116.    43.72    34.72    78.45     4.642    0.369
 5.011       7.482       0.140         7.447         2.031
Total Scrubbed Coal                 2
   21780.     17663.     39443.   231.10   187.40   418.50    50.018   41.381
91.398      47.169       1.012        40.052        10.923
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    8674.      6572.     15246.    91.27    69.68   160.95    24.229   18.253
42.481      69.904       0.421        15.385         4.196
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                          7
    5668.      4084.      9752.    55.33    39.87    95.20     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                            8
     601.       418.      1020.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                   9
       0.       740.       740.     0.00     5.55     5.55     0.000    0.055
 0.055       0.000       0.000         0.295         0.080
Total IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                         11
       0.       274.       274.     0.00     2.97     2.97     0.000    0.141
 0.141       0.000       0.000         0.158         0.043
Total Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                      13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                    14
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Wind                            15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                           17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                    19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                    20
      51.        37.        89.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                         23
       0.         3.         3.     0.00     0.03     0.03     0.000    0.001
 0.001       0.000       0.000         0.001         0.000
Total Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                   27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total SPPN
   41299.     33384.     74683.   421.43   340.22   761.65    78.888   60.200  1
39.089     124.555       1.573        63.338        17.274
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: SPPS     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
    2158.      1714.      3872.    23.20    18.43    41.63     3.608    2.865
 6.473       3.876       0.091         4.016         1.095
Total Unscrubbed Coal_NOx           3
    2034.      1615.      3649.    21.76    17.28    39.03     4.938    3.922
 8.861      14.247       0.123         3.766         1.027
Total Unscrubbed Coal               4
   35679.     28337.     64016.   359.96   285.88   645.84    62.409   49.567  1
11.976     237.523       1.710        62.303        16.992
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
    4702.      3448.      8150.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                9
   17414.     22767.     40181.   130.99   172.35   303.34     1.515    2.434
 3.949       0.000       0.000        16.098         4.390
```

```
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       0.       512.       512.     0.00     6.03     6.03     0.000    0.269
 0.269       0.000       0.000         0.320         0.087
Total Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
      40.        31.        71.     0.55     0.42     0.97     0.068    0.052
 0.119       0.000       0.000         0.000         0.000
Total Wind                          15
      66.        37.       102.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
     101.        80.       181.     0.48     0.38     0.87     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.        43.        43.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
    1243.      1003.      2246.    10.63     8.57    19.20     2.067    1.668
 3.734       9.600       0.062         1.852         0.505
Total Cgn_Gas                       23
    3536.      3337.      6874.    26.52    25.57    52.10     0.265    0.378
 0.643       0.000       0.000         2.765         0.754
Total Cgn_Oil                       24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
     156.       121.       277.     0.66     0.51     1.17     0.001    0.001
 0.001       0.005       0.000         0.000         0.000
Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other               28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                       31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuke Early Retirement 74
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total SPPS
67129. 63045. 130174. 574.75 535.43 1110.18 74.871 61.155 1
36.026 265.251 1.986 91.121 24.851

(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2005, Region: CALI (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Scrubbed Coal 2
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal 4
710. 564. 1273. 7.79 6.19 13.97 0.802 0.637
1.438 6.987 0.029 1.301 0.355
Total Oil/Gas Steam 5
13334. 5410. 18744. 127.14 51.59 178.72 1.271 0.516
1.787 0.000 0.000 9.485 2.587
Total Oil/Gas Steam_Nox 6
103. 82. 185. 0.97 0.77 1.74 0.006 0.005
0.011 0.000 0.000 0.092 0.025
Total Nuclear 7
19598. 14973. 34570. 200.10 152.28 352.38 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
16750. 17655. 34405. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
26495. 20334. 46829. 200.02 153.55 353.56 2.046 1.571
3.617 0.000 0.000 18.764 5.117
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
167. 505. 672. 1.53 5.31 6.84 0.078 0.225
0.303 0.000 0.000 0.363 0.099
Total Biomass 12
1872. 1447. 3319. 17.09 13.21 30.30 0.171 0.132
0.303 1.212 0.009 0.000 0.000
Total Geothermal 13
11344. 8966. 20310. 291.69 230.53 522.21 0.000 0.000

0.000 0.000 0.775 0.000 0.000
Total Landfill Gas 14
966. 737. 1703. 12.24 9.34 21.58 1.506 1.148
2.654 0.000 0.000 0.000 0.000
Total Wind 15
4635. 2599. 7234. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
516. 274. 790. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
785. 619. 1403. 9.00 7.10 16.10 0.000 0.000
0.000 0.000 0.225 0.000 0.000
Total Fossil_Other 19
89. 68. 158. 0.98 0.75 1.73 0.064 0.049
0.114 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 115. 115. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
1356. 1094. 2450. 12.37 9.98 22.36 0.557 0.449
1.006 10.319 0.041 2.082 0.568
Total Cgn_Gas 23
25355. 15754. 41108. 218.38 130.40 348.78 4.730 1.921
6.651 0.000 0.000 18.510 5.048
Total Cgn_Oil 24
1741. 1405. 3145. 13.16 10.62 23.79 0.099 0.080
0.178 0.000 0.000 1.262 0.344
Total Cgn_Other 25
576. 444. 1020. 4.10 3.16 7.26 0.078 0.060
0.139 0.210 0.016 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring          69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement            70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement            71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement           72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement          73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement          74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total CALI
  126390.     93044.    219434.  1116.57   784.77  1901.33    11.409    6.793
18.202      18.728       1.093        51.860        14.144
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: PNW      (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                  2
    5561.      4417.      9978.    56.95    45.23   102.17    11.389    9.046
20.435       5.364       0.237         9.858         2.688
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
    2212.      1757.      3969.    23.92    19.00    42.93     5.280    4.194
 9.474      15.782       0.095         4.135         1.128
Total Oil/Gas Steam                  5
       0.       155.       155.     0.00     1.64     1.64     0.000    0.296
 0.296       0.000       0.000         0.087         0.024
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
    5713.      3138.      8851.    57.49    31.58    89.07     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
   63340.     47747.    111087.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
   13647.     10468.     24115.   106.21    81.47   187.67     2.247    1.723
 3.970       0.000       0.000         9.960         2.716
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
    4398.      5271.      9669.    47.32    56.77   104.09     2.128    2.564
 4.692       0.000       0.000         5.524         1.507
Total Biomass                       12
      26.        20.        46.     0.21     0.16     0.37     0.002    0.002
 0.004       0.015       0.000         0.000         0.000
Total Geothermal                    13
      34.        27.        61.     1.10     0.87     1.97     0.000    0.000
 0.000       0.000       0.004         0.000         0.000
Total Landfill Gas                  14
      94.        72.       166.     1.28     0.98     2.26     0.158    0.120
 0.278       0.000       0.000         0.000         0.000
Total Wind                          15
     185.       104.       290.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
     256.       202.       457.     2.81     2.22     5.03     0.000    0.000
 0.000       0.000       0.102         0.000         0.000
Total Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
    5465.      3944.      9408.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                        23
    5024.      3854.      8878.    39.24    30.10    69.33     1.126    0.864
 1.989       0.000       0.000         3.680         1.004
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
     416.       321.       738.     3.55     2.75     6.30     0.036    0.027
 0.063       0.252       0.002         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total PNW
  106370.     81496.    187866.   340.08   272.76   612.84    22.365   18.836
41.202      21.413       0.440        33.243         9.066
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: AZNM     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
```

	(1000 Tons)			(Tons)			(Mil Tonnes)		(Mil Tonnes)		
	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER			
Total Scrubbed Coal_NOx	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
Total Scrubbed Coal	38509.	30585.	69094.	393.98	312.91	706.89	88.795	70.523	1	59.318	85.093
Total Unscrubbed Coal_NOx	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
Total Unscrubbed Coal	1726.	1371.	3098.	17.84	14.17	32.00	3.766	2.991	6.757	12.432	0.033
Total Oil/Gas Steam	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
Total Oil/Gas Steam_Nox	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
Total Nuclear	16738.	13763.	30501.	176.20	144.84	321.04	0.000	0.000	0.000	0.000	0.000
Total Hydro	3484.	3538.	7022.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
Total Comb.Cycle Gas	28159.	24130.	52289.	212.12	182.35	394.47	2.545	2.354	4.899	0.000	0.000
Total IGCC	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
Total Turbine	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
Total Biomass	78.	60.	138.	0.62	0.48	1.11	0.006	0.005	0.011	0.044	0.000
Total Geothermal	123.	98.	221.	3.99	3.15	7.14	0.000	0.000	0.000	0.000	0.013
Total Landfill Gas	49.	38.	87.	0.67	0.51	1.18	0.083	0.063	0.146	0.000	0.000
Total Wind	102.	57.	159.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
Total Fuel Cell	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
Total Solar	17.	12.	29.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
Total Non Fossil_Other	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
Total Fossil_Other	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
Total Pump Storage	0.	46.	46.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000

Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Gas 23
0. 771. 771. 0.00 6.10 6.10 0.000 0.191
0.191 0.000 0.000 0.324 0.088
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total AZNM
   88986.     74470.    163456.   805.43   664.51  1469.94    95.195   76.127  1
71.322      97.569       1.129        91.105        24.847
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: RMPA     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
     332.       264.       596.     2.99     2.37     5.36     0.164    0.131
 0.295       0.295       0.002         0.499         0.136
Total Scrubbed Coal                 2
   17256.     13361.     30618.   180.44   139.57   320.01    33.663   26.043
59.706      24.502       0.342        30.155         8.224
```

```
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
    8167.      6421.     14588.    85.70    67.30   153.00    21.904   17.025
38.929      52.165       0.111        14.568         3.973
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    3767.      3826.      7592.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
     532.        77.       609.     4.04     0.59     4.63     0.063    0.009
 0.072       0.000       0.000         0.246         0.067
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Biomass                       12
       4.         3.         7.     0.03     0.02     0.05     0.000    0.000
 0.001       0.002       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       4.         3.         8.     0.06     0.05     0.11     0.008    0.006
 0.013       0.000       0.000         0.000         0.000
Total Wind                          15
     648.       363.      1011.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       5.         3.         7.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Oil                       24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
      30.        18.        48.     0.24     0.14     0.38     0.002    0.001
 0.004       0.015       0.000         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                        49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI               51
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

```
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total RMPA
   30746.     24338.     55084.   273.51   210.04   483.55    55.804   43.215
99.019      76.979       0.455        45.468        12.400
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Region: NWPE     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
   43487.     30622.     74109.   444.94   312.97   757.91    93.567   66.309  1
59.876      44.215       0.718        71.320        19.451
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    7819.      6210.     14029.    80.57    63.99   144.57    17.408   13.826
31.234      57.684       0.203        13.624         3.716
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
2460. 2498. 4958. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
0. 41. 41. 0.00 0.31 0.31 0.000 0.003
0.003 0.000 0.000 0.016 0.004
Total IGCC 10
433. 335. 768. 3.15 2.44 5.59 0.095 0.073
0.168 0.000 0.001 0.520 0.142
Total Turbine 11
0. 2. 2. 0.00 0.02 0.02 0.000 0.001
0.001 0.000 0.000 0.001 0.000
Total Biomass 12
22. 13. 34. 0.17 0.10 0.27 0.002 0.001
0.003 0.011 0.000 0.000 0.000
Total Geothermal 13
1026. 811. 1837. 32.60 25.77 58.37 0.000 0.000
0.000 0.000 0.106 0.000 0.000
Total Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Wind 15
62. 35. 97. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
38. 20. 59. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
183. 140. 323. 2.02 1.54 3.56 0.706 0.538
1.244 0.012 0.018 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
223. 180. 402. 1.81 1.46 3.28 0.325 0.263
0.588 1.638 0.007 0.316 0.086
Total Cgn_Gas 23
34. 26. 59. 0.22 0.17 0.38 0.016 0.012
0.028 0.000 0.000 0.020 0.006
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
43. 33. 77. 0.18 0.14 0.32 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Coal                        29
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Gas                         30
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Oil                         31
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Other                       32
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total SteamOnly Cogen                 33
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-CC                     34
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.O/G-CC                      35
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-IGCC                   36
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Scrubber                    37
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR & Scrub            38
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR & Scrub           39
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR                         40
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SCR            41
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR                        42
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SNCR           43
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR+Scrb                    44
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR+Scrub                  45
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Gas Reburn                  46
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR             47
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub             48
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                         49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NWPE
   55830.     40966.     96796.   565.68   408.90   974.58   112.118   81.027  1
93.145     103.560       1.054        85.818        23.405
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration




-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Scrubbed Coal_NOx              1         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Scrubbed Coal_NOx              1
      83.        66.       149.     0.86     0.69     1.55     0.259    0.134
 0.393       0.258       0.000         0.144         0.039
ECAO    Scrubbed Coal_NOx              1
   40273.     31882.     72155.   396.73   313.83   710.56    98.071   10.463  1
08.534      85.296       1.013        66.169        18.046
ERCT    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Scrubbed Coal_NOx              1
    6395.      4919.     11315.    60.86    46.72   107.57    18.957    2.620
21.577      14.464       0.666        10.017         2.732
MACW    Scrubbed Coal_NOx              1
    4856.      3856.      8712.    45.81    36.39    82.20     7.033    0.556
 7.589       6.936       0.172         7.655         2.088
MACS    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Scrubbed Coal_NOx              1
     249.       198.       447.     2.49     1.97     4.46     0.426    0.204
 0.630       0.395       0.001         0.415         0.113
MAPP    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
UPNY    Scrubbed Coal_NOx             1
    3453.      2742.      6195.    31.97    25.39    57.35     6.764    0.533
 7.297       8.637       0.074         5.341         1.457
DSNY    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Scrubbed Coal_NOx             1
     324.       257.       581.     3.37     2.68     6.04     0.339    0.269
 0.607       0.453       0.019         0.563         0.153
FRCC    Scrubbed Coal_NOx             1
    8931.      7093.     16024.    86.61    68.78   155.39    23.405   18.589
41.994      14.398       0.130        14.470         3.946
VACA    Scrubbed Coal_NOx             1
   18838.     14961.     33799.   183.88   146.04   329.91    25.147    4.651
29.798      25.521       0.341        30.722         8.379
TVA     Scrubbed Coal_NOx             1
   24905.     19780.     44685.   243.93   193.74   437.67    77.047    6.779
83.826      53.234       0.462        40.757        11.116
SOU     Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Scrubbed Coal_NOx             1
    4524.      3593.      8116.    43.72    34.72    78.45     4.642    0.369
 5.011       7.482       0.140         7.447         2.031
SPPS    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Scrubbed Coal_NOx             1
     332.       264.       596.     2.99     2.37     5.36     0.164    0.131
 0.295       0.295       0.002         0.499         0.136
NWPE    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Scrubbed Coal_NOx             1
  113162.     89612.    202774.  1103.21   873.31  1976.51   262.254   45.297  3
07.550     217.369       3.020       184.200        50.236
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

SO2 MER CO2 Carbon
Year: 2005, Plant Type: Scrubbed Coal 2 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Scrubbed Coal				2				
		444.	285.	729.	5.00	3.22	8.22	0.781	0.501
1.282	0.377	0.009			0.766		0.209		
ECAO	Scrubbed Coal				2				
		31854.	24755.	56609.	320.82	249.00	569.83	63.442	48.623 1
12.065	159.451	0.926			53.064		14.472		
ERCT	Scrubbed Coal				2				
		25288.	20084.	45372.	271.46	215.60	487.07	42.088	33.427
75.516	146.685	1.250			47.443		12.939		
MACE	Scrubbed Coal				2				
		2411.	1906.	4318.	24.06	19.03	43.09	3.730	2.949
6.679	4.460	0.139			4.013		1.094		
MACW	Scrubbed Coal				2				
		652.	451.	1102.	6.82	4.71	11.53	1.552	1.068
2.620	1.571	0.026			1.074		0.293		
MACS	Scrubbed Coal				2				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
WUMS	Scrubbed Coal				2				
		765.	608.	1372.	8.18	6.50	14.68	1.976	1.569
3.545	5.710	0.015			1.367		0.373		
MANO	Scrubbed Coal				2				
		2307.	1586.	3894.	24.88	17.14	42.02	6.023	4.047
10.070	11.840	0.072			3.913		1.067		
MAPP	Scrubbed Coal				2				
		27332.	21416.	48748.	293.08	229.64	522.72	56.756	44.596 1
01.352	91.893	1.337			50.582		13.795		
UPNY	Scrubbed Coal				2				
		618.	491.	1109.	5.85	4.64	10.49	1.228	0.975
2.203	0.629	0.020			0.977		0.266		
DSNY	Scrubbed Coal				2				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
NYC	Scrubbed Coal				2				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
LILC	Scrubbed Coal				2				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
NENG	Scrubbed Coal				2				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
FRCC	Scrubbed Coal				2				
		19286.	15317.	34603.	190.54	151.33	341.86	43.872	34.844
78.716	102.463	0.446			31.835		8.682		
VACA	Scrubbed Coal				2				
		2743.	2179.	4922.	28.53	22.66	51.19	3.361	2.669
6.030	5.882	0.052			4.767		1.300		
TVA	Scrubbed Coal				2				
		515.	409.	923.	5.48	4.35	9.83	1.222	0.971
2.192	2.950	0.002			0.916		0.250		
SOU	Scrubbed Coal				2				
		4042.	3210.	7253.	42.90	34.07	76.96	8.425	6.691
15.116	17.391	0.149			7.167		1.955		

```
ENTG    Scrubbed Coal                   2
    2781.      2208.      4989.    27.95    22.19    50.14     4.038    3.207
 7.245       5.616       0.136         4.837         1.319
SPPN    Scrubbed Coal                   2
   21780.     17663.     39443.   231.10   187.40   418.50    50.018   41.381
91.398      47.169       1.012        40.052        10.923
SPPS    Scrubbed Coal                   2
    2158.      1714.      3872.    23.20    18.43    41.63     3.608    2.865
 6.473       3.876       0.091         4.016         1.095
CALI    Scrubbed Coal                   2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Scrubbed Coal                   2
    5561.      4417.      9978.    56.95    45.23   102.17    11.389    9.046
20.435       5.364       0.237         9.858         2.688
AZNM    Scrubbed Coal                   2
   38509.     30585.     69094.   393.98   312.91   706.89    88.795   70.523  1
59.318      85.093       1.083        66.866        18.236
RMPA    Scrubbed Coal                   2
   17256.     13361.     30618.   180.44   139.57   320.01    33.663   26.043
59.706      24.502       0.342        30.155         8.224
NWPE    Scrubbed Coal                   2
   43487.     30622.     74109.   444.94   312.97   757.91    93.567   66.309  1
59.876      44.215       0.718        71.320        19.451

Total Scrubbed Coal                 2
  249790.    193267.    443057.  2586.17  2000.58  4586.75   519.533  402.305  9
21.838     767.135       8.060       434.987       118.633
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Unscrubbed Coal_NOx            3         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Unscrubbed Coal_NOx             3
   12533.      9954.     22488.   115.39    91.65   207.04    20.489    1.725
22.213     103.521       0.456        19.970         5.446
ECAO    Unscrubbed Coal_NOx             3
   57088.     43599.    100688.   532.94   406.71   939.65   140.174   20.917  1
61.091     657.325       2.000        87.705        23.920
ERCT    Unscrubbed Coal_NOx             3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Unscrubbed Coal_NOx             3
    4950.      3582.      8532.    50.25    36.25    86.50     9.047    3.691
12.738      47.573       0.149         8.055         2.197
MACW    Unscrubbed Coal_NOx             3
   11730.      9028.     20758.   108.39    83.21   191.60    26.611    2.034
28.644     208.767       1.114        17.842         4.866
MACS    Unscrubbed Coal_NOx             3
    2447.      1700.      4147.    23.78    16.40    40.18     7.579    2.263
```

```
 9.842      26.439       0.046         3.742         1.020
WUMS    Unscrubbed Coal_NOx            3
     285.       226.       511.     3.06     2.43     5.49     0.685    0.544
 1.230       1.878       0.012         0.530         0.144
MANO    Unscrubbed Coal_NOx            3
    2690.      1980.      4670.    26.96    19.89    46.85     8.233    1.600
 9.833      20.274       0.098         4.429         1.208
MAPP    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Unscrubbed Coal_NOx            3
    1502.      1098.      2600.    14.92    10.85    25.77     2.718    1.275
 3.993      28.349       0.152         2.400         0.655
DSNY    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Unscrubbed Coal_NOx            3
    3231.      2069.      5300.    32.33    20.45    52.78    10.596    1.508
12.104      53.110       0.285         4.915         1.341
FRCC    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Unscrubbed Coal_NOx            3
   34475.     26373.     60848.   327.97   250.28   578.25    69.959    9.463
79.422     403.405       0.965        53.848        14.686
TVA     Unscrubbed Coal_NOx            3
   12687.     10076.     22763.   120.47    95.68   216.16    29.594    2.352
31.946     143.571       0.404        20.129         5.490
SOU     Unscrubbed Coal_NOx            3
   28196.     22394.     50590.   267.16   212.18   479.34    55.227    4.370
59.597     304.837       0.742        44.638        12.174
ENTG    Unscrubbed Coal_NOx            3
    4814.      3824.      8638.    48.38    38.43    86.81    17.684    1.403
19.086      20.400       0.114         8.084         2.205
SPPN    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Unscrubbed Coal_NOx            3
    2034.      1615.      3649.    21.76    17.28    39.03     4.938    3.922
 8.861      14.247       0.123         3.766         1.027
CALI    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Unscrubbed Coal_NOx            3
  178664.    137518.    316182.  1693.76  1301.69  2995.45   403.535   57.065  4
60.601    2033.695       6.658       280.052        76.378
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Unscrubbed Coal                4         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Unscrubbed Coal                4
   26614.     18165.     44779.   259.67   177.12   436.79    44.504   29.875
74.380     203.017       0.773        41.411        11.294
ECAO    Unscrubbed Coal                4
   78736.     46094.    124830.   768.78   447.84  1216.62   165.395   91.231  2
56.626     766.462       2.644       114.156        31.133
ERCT    Unscrubbed Coal                4
    9898.     10737.     20635.    97.63   108.13   205.76    15.044   16.517
31.561     156.811       0.651        19.795         5.399
MACE    Unscrubbed Coal                4
     977.       610.      1587.     9.96     6.24    16.19     1.934    1.202
 3.136       8.907       0.022         1.508         0.411
MACW    Unscrubbed Coal                4
    8441.      4459.     12900.    81.15    42.49   123.64    16.393    8.444
24.836      69.273       0.226        11.514         3.140
MACS    Unscrubbed Coal                4
    2258.      1794.      4052.    21.43    17.02    38.44     3.988    3.167
 7.155      33.840       0.146         3.580         0.976
WUMS    Unscrubbed Coal                4
   25868.     20680.     46548.   267.07   213.96   481.03    45.022   36.248
81.270     195.964       1.115        45.928        12.526
MANO    Unscrubbed Coal                4
   58846.     36917.     95763.   590.04   369.96   960.00   114.220   62.691  1
76.912     468.061       2.377        91.788        25.033
MAPP    Unscrubbed Coal                4
   44107.     34313.     78420.   463.61   360.94   824.54   100.085   80.807  1
80.892     382.335       2.019        79.065        21.563
UPNY    Unscrubbed Coal                4
    7159.      3838.     10997.    74.22    39.73   113.95    13.464    6.624
20.088     121.312       0.839        10.611         2.894
DSNY    Unscrubbed Coal                4
    3063.      1791.      4854.    31.73    18.52    50.25     5.923    3.458
 9.382      25.634       0.083         4.679         1.276
NYC     Unscrubbed Coal                4
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Unscrubbed Coal                4
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Unscrubbed Coal                4
    2030.      1272.      3302.    19.11    11.90    31.01     3.220    2.171
 5.391      22.219       0.113         2.888         0.788
FRCC    Unscrubbed Coal                4
   10529.      8362.     18891.   100.19    79.58   179.77    22.195   17.628
39.823      89.886       0.214        16.741         4.566
```

```
VACA    Unscrubbed Coal                 4
   37061.     23600.     60660.   360.52   226.64   587.16    71.250   43.487  1
14.737     400.555       1.032        54.678        14.912
TVA     Unscrubbed Coal                 4
   21863.     14118.     35981.   222.79   142.15   364.94    43.679   27.910
71.590     201.722       0.539        34.108         9.302
SOU     Unscrubbed Coal                 4
   51901.     39133.     91034.   508.15   380.56   888.72    95.792   71.291  1
67.083     516.190       1.619        83.141        22.675
ENTG    Unscrubbed Coal                 4
   24538.     19998.     44536.   252.15   205.69   457.84    42.390   34.652
77.042     177.116       1.378        44.029        12.008
SPPN    Unscrubbed Coal                 4
    8674.      6572.     15246.    91.27    69.68   160.95    24.229   18.253
42.481      69.904       0.421        15.385         4.196
SPPS    Unscrubbed Coal                 4
   35679.     28337.     64016.   359.96   285.88   645.84    62.409   49.567  1
11.976     237.523       1.710        62.303        16.992
CALI    Unscrubbed Coal                 4
     710.       564.      1273.     7.79     6.19    13.97     0.802    0.637
 1.438       6.987       0.029         1.301         0.355
PNW     Unscrubbed Coal                 4
    2212.      1757.      3969.    23.92    19.00    42.93     5.280    4.194
 9.474      15.782       0.095         4.135         1.128
AZNM    Unscrubbed Coal                 4
    1726.      1371.      3098.    17.84    14.17    32.00     3.766    2.991
 6.757      12.432       0.033         2.980         0.813
RMPA    Unscrubbed Coal                 4
    8167.      6421.     14588.    85.70    67.30   153.00    21.904   17.025
38.929      52.165       0.111        14.568         3.973
NWPE    Unscrubbed Coal                 4
    7819.      6210.     14029.    80.57    63.99   144.57    17.408   13.826
31.234      57.684       0.203        13.624         3.716

Total Unscrubbed Coal                 4
  478876.    337113.    815989.  4795.26  3374.67  8169.93   940.297  643.896 15
84.193    4291.780      18.390       773.916       211.068
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Oil/Gas Steam                 5         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Oil/Gas Steam                   5
    1053.       570.      1623.    10.10     5.46    15.56     1.005    0.544
 1.548       0.000       0.000         0.826         0.225
ECAO    Oil/Gas Steam                   5
       0.          0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Oil/Gas Steam                   5
       0.      9255.      9255.     0.00    91.57    91.57     0.000   14.882
```

14.882 0.000 0.000 4.860 1.325
MACE Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Oil/Gas Steam 5
5621. 6174. 11796. 53.63 58.90 112.53 3.674 4.035
7.708 0.000 0.000 5.972 1.629
LILC Oil/Gas Steam 5
1015. 2361. 3376. 10.68 24.85 35.53 0.486 1.217
1.703 0.000 0.000 1.886 0.514
NENG Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Oil/Gas Steam 5
13334. 5410. 18744. 127.14 51.59 178.72 1.271 0.516
1.787 0.000 0.000 9.485 2.587
PNW Oil/Gas Steam 5
0. 155. 155. 0.00 1.64 1.64 0.000 0.296
0.296 0.000 0.000 0.087 0.024
AZNM Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Oil/Gas Steam 5

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Oil/Gas Steam                  5
   21023.     23926.     44949.   201.54   234.02   435.56     6.435   21.489
27.924       0.000       0.000        23.115         6.304
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Oil/Gas Steam_Nox              6         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Oil/Gas Steam_Nox              6
       0.      1324.      1324.     0.00    13.16    13.16     0.000    0.924
 0.924       0.000       0.000         0.699         0.191
MACE    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
LILC    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Oil/Gas Steam_Nox              6
     103.        82.       185.     0.97     0.77     1.74     0.006    0.005
 0.011       0.000       0.000         0.092         0.025
PNW     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Oil/Gas Steam_Nox              6
     103.      1406.      1509.     0.97    13.94    14.91     0.006    0.929
 0.935       0.000       0.000         0.791         0.216
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Nuclear                        7         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
               (GWh)                            (Btu)                  (1000 Tons)
          (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

```
MECS    Nuclear                         7
    8196.      5483.     13679.    96.43    66.99   163.42     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Nuclear                         7
   25904.     16792.     42696.   272.53   176.41   448.94     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Nuclear                         7
   21792.     17018.     38810.   227.89   177.79   405.68     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Nuclear                         7
   39447.     28692.     68139.   419.38   305.15   724.53     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Nuclear                         7
   14951.      9693.     24644.   159.13   103.35   262.48     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Nuclear                         7
    8494.      5572.     14066.    92.30    60.55   152.85     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Nuclear                         7
    6577.      5013.     11590.    69.75    53.40   123.15     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Nuclear                         7
   59814.     44583.    104397.   631.44   470.20  1101.65     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Nuclear                         7
   14337.     11391.     25728.   153.69   121.81   275.49     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Nuclear                         7
   12669.     11132.     23800.   132.77   116.74   249.51     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Nuclear                         7
    7419.      7060.     14479.    76.02    72.18   148.21     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Nuclear                         7
   19835.     14215.     34051.   200.38   143.60   343.98     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Nuclear                         7
   17948.     13845.     31794.   196.33   151.55   347.88     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Nuclear                         7
   66376.     52077.    118452.   679.04   533.20  1212.25     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Nuclear                         7
   27738.     20544.     48282.   288.40   213.35   501.75     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Nuclear                         7
   25980.     20072.     46052.   283.85   219.39   503.25     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Nuclear                         7
   23670.     17582.     41252.   262.52   195.14   457.65     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Nuclear                         7
    5668.      4084.      9752.    55.33    39.87    95.20     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Nuclear                         7
```

```
   19598.     14973.     34570.   200.10   152.28   352.38     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Nuclear                        7
    5713.      3138.      8851.    57.49    31.58    89.07     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Nuclear                        7
   16738.     13763.     30501.   176.20   144.84   321.04     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Nuclear                        7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Nuclear                        7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Nuclear                        7
  448862.    336724.    785586.  4730.98  3549.37  8280.35     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Hydro                          8         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Hydro                          8
     618.       395.      1013.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Hydro                          8
    1806.      1169.      2974.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Hydro                          8
     431.       365.       796.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Hydro                          8
    2346.      1770.      4115.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Hydro                          8
    1512.       632.      2144.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Hydro                          8
      43.        16.        59.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Hydro                          8
    1007.       676.      1683.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Hydro                          8
    1079.       747.      1826.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Hydro                          8
    5412.      4577.      9989.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
UPNY    Hydro                           8
   15534.     10355.     25889.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Hydro                           8
    1237.       824.      2061.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Hydro                           8
       0.          0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Hydro                           8
       0.          0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Hydro                           8
    3489.      1724.      5212.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Hydro                           8
      83.        38.       121.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Hydro                           8
    6437.      3139.      9575.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Hydro                           8
   11469.      6255.     17724.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Hydro                           8
    6138.      2706.      8844.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Hydro                           8
     646.       474.      1120.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Hydro                           8
     601.       418.      1020.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Hydro                           8
    4702.      3448.      8150.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Hydro                           8
   16750.     17655.     34405.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Hydro                           8
   63340.     47747.    111087.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Hydro                           8
    3484.      3538.      7022.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Hydro                           8
    3767.      3826.      7592.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Hydro                           8
    2460.      2498.      4958.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Hydro                         8
  154390.    114990.    269380.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
```

Year: 2005, Plant Type: Comb.Cycle Gas 9 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Comb.Cycle Gas				9				
		235.	750.	984.	1.76	5.62	7.38	0.018	0.056
0.074	0.000	0.000			0.392		0.107		
ECAO	Comb.Cycle Gas				9				
		2075.	2785.	4859.	15.59	20.91	36.50	0.172	0.222
0.394	0.000	0.000			1.937		0.528		
ERCT	Comb.Cycle Gas				9				
		62588.	52526.	115114.	469.72	395.09	864.81	4.754	4.208
8.963	0.000	0.000			45.896		12.517		
MACE	Comb.Cycle Gas				9				
		4600.	3676.	8276.	35.51	28.75	64.25	0.682	0.582
1.264	0.000	0.000			3.410		0.930		
MACW	Comb.Cycle Gas				9				
		1089.	1385.	2474.	8.17	10.38	18.55	0.082	0.104
0.186	0.000	0.000			0.985		0.269		
MACS	Comb.Cycle Gas				9				
		95.	73.	169.	0.81	0.62	1.43	0.032	0.025
0.057	0.000	0.000			0.076		0.021		
WUMS	Comb.Cycle Gas				9				
		419.	158.	577.	3.56	1.34	4.91	0.214	0.081
0.294	0.000	0.000			0.260		0.071		
MANO	Comb.Cycle Gas				9				
		566.	1722.	2288.	4.25	12.93	17.17	0.042	0.131
0.173	0.000	0.000			0.911		0.249		
MAPP	Comb.Cycle Gas				9				
		206.	570.	776.	1.57	4.35	5.92	0.023	0.072
0.095	0.000	0.000			0.314		0.086		
UPNY	Comb.Cycle Gas				9				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
DSNY	Comb.Cycle Gas				9				
		7861.	5900.	13761.	59.04	44.25	103.29	0.611	0.442
1.054	0.000	0.000			5.482		1.495		
NYC	Comb.Cycle Gas				9				
		1665.	1277.	2941.	13.38	10.26	23.64	0.704	0.540
1.244	0.000	0.000			1.255		0.342		
LILC	Comb.Cycle Gas				9				
		472.	407.	879.	3.76	3.39	7.15	0.121	0.140
0.262	0.000	0.000			0.380		0.104		
NENG	Comb.Cycle Gas				9				
		32985.	24740.	57726.	249.70	187.26	436.96	3.689	2.754
6.443	0.000	0.000			23.189		6.324		
FRCC	Comb.Cycle Gas				9				
		28325.	32651.	60976.	219.49	253.12	472.61	5.597	6.467
12.064	0.000	0.000			25.082		6.840		
VACA	Comb.Cycle Gas				9				
		311.	1933.	2244.	2.33	15.24	17.57	0.023	0.436
0.459	0.000	0.000			0.933		0.254		
TVA	Comb.Cycle Gas				9				
		1209.	2820.	4029.	9.07	21.15	30.22	0.091	0.211
0.302	0.000	0.000			1.604		0.437		
SOU	Comb.Cycle Gas				9				
		14138.	21468.	35607.	106.13	161.19	267.32	1.095	1.678
2.773	0.000	0.000			14.187		3.869		
ENTG	Comb.Cycle Gas				9				

```
    4830.     13032.     17862.    36.23    97.74   133.96     0.362    0.977
 1.340       0.000       0.000         7.110         1.939
SPPN    Comb.Cycle Gas                  9
       0.       740.       740.     0.00     5.55     5.55     0.000    0.055
 0.055       0.000       0.000         0.295         0.080
SPPS    Comb.Cycle Gas                  9
   17414.     22767.     40181.   130.99   172.35   303.34     1.515    2.434
 3.949       0.000       0.000        16.098         4.390
CALI    Comb.Cycle Gas                  9
   26495.     20334.     46829.   200.02   153.55   353.56     2.046    1.571
 3.617       0.000       0.000        18.764         5.117
PNW     Comb.Cycle Gas                  9
   13647.     10468.     24115.   106.21    81.47   187.67     2.247    1.723
 3.970       0.000       0.000         9.960         2.716
AZNM    Comb.Cycle Gas                  9
   28159.     24130.     52289.   212.12   182.35   394.47     2.545    2.354
 4.899       0.000       0.000        20.935         5.709
RMPA    Comb.Cycle Gas                  9
     532.        77.       609.     4.04     0.59     4.63     0.063    0.009
 0.072       0.000       0.000         0.246         0.067
NWPE    Comb.Cycle Gas                  9
       0.        41.        41.     0.00     0.31     0.31     0.000    0.003
 0.003       0.000       0.000         0.016         0.004

Total Comb.Cycle Gas                 9
  249918.    246430.    496348.  1893.45  1869.74  3763.19    26.731   27.276
54.006       0.000       0.000       199.714        54.467
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: IGCC                          10         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    IGCC                            10
    1135.       877.      2013.     8.26     6.38    14.64     0.413    0.319
 0.732       0.000       0.006         1.364         0.372
ERCT    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
WUMS    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    IGCC                            10
    1083.       837.      1921.     7.88     6.09    13.97     0.394    0.305
 0.699       0.000       0.003         1.301         0.355
VACA    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    IGCC                            10
     433.       335.       768.     3.15     2.44     5.59     0.095    0.073
 0.168       0.000       0.001         0.520         0.142

Total IGCC                          10
    2652.      2050.      4702.    19.30    14.91    34.21     0.902    0.697
 1.598       0.000       0.010         3.185         0.869
-------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER          CO2          Carbon
Year: 2005, Plant Type: Turbine                      11         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Turbine                        11
       0.         2.         2.     0.00     0.01     0.01     0.000    0.001
 0.001       0.000       0.000         0.001         0.000
ECAO    Turbine                        11
       0.       162.       162.     0.00     1.76     1.76     0.000    0.072
 0.072       0.000       0.000         0.094         0.026
ERCT    Turbine                        11
     422.       928.      1350.     4.95    10.72    15.68     0.237    0.491
 0.727       0.000       0.000         0.832         0.227
MACE    Turbine                        11
       0.         1.         1.     0.00     0.01     0.01     0.000    0.001
 0.001       0.000       0.000         0.001         0.000
MACW    Turbine                        11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Turbine                        11
     193.       463.       655.     2.07     5.58     7.65     0.107    0.298
 0.405       0.000       0.000         0.406         0.111
WUMS    Turbine                        11
     491.       450.       941.     5.37     4.97    10.34     0.215    0.202
 0.417       0.000       0.000         0.549         0.150
MANO    Turbine                        11
       0.       917.       917.     0.00    10.00    10.00     0.000    0.411
 0.411       0.000       0.000         0.531         0.145
MAPP    Turbine                        11
       0.       220.       220.     0.00     2.37     2.37     0.000    0.101
 0.101       0.000       0.000         0.126         0.034
UPNY    Turbine                        11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Turbine                        11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Turbine                        11
     106.        79.       186.     1.16     0.87     2.03     0.046    0.035
 0.081       0.000       0.000         0.108         0.029
LILC    Turbine                        11
    1538.      1240.      2779.    17.02    13.92    30.94     0.711    0.605
 1.317       0.000       0.000         1.642         0.448
NENG    Turbine                        11
      10.         7.        17.     0.10     0.07     0.17     0.006    0.004
 0.010       0.000       0.000         0.009         0.002
FRCC    Turbine                        11
       0.      1626.      1626.     0.00    17.81    17.81     0.000    0.734
 0.734       0.000       0.000         0.945         0.258
VACA    Turbine                        11
```

```
       0.         5.         5.     0.00     0.05     0.05     0.000    0.002
 0.002       0.000       0.000         0.003         0.001
TVA     Turbine                        11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Turbine                        11
       0.         2.         2.     0.00     0.01     0.01     0.000    0.001
 0.001       0.000       0.000         0.001         0.000
ENTG    Turbine                        11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Turbine                        11
       0.       274.       274.     0.00     2.97     2.97     0.000    0.141
 0.141       0.000       0.000         0.158         0.043
SPPS    Turbine                        11
       0.       512.       512.     0.00     6.03     6.03     0.000    0.269
 0.269       0.000       0.000         0.320         0.087
CALI    Turbine                        11
     167.       505.       672.     1.53     5.31     6.84     0.078    0.225
 0.303       0.000       0.000         0.363         0.099
PNW     Turbine                        11
    4398.      5271.      9669.    47.32    56.77   104.09     2.128    2.564
 4.692       0.000       0.000         5.524         1.507
AZNM    Turbine                        11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Turbine                        11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Turbine                        11
       0.         2.         2.     0.00     0.02     0.02     0.000    0.001
 0.001       0.000       0.000         0.001         0.000

Total Turbine                          11
    7326.     12665.     19991.    79.52   139.27   218.79     3.528    6.159
 9.688       0.000       0.000        11.611         3.167
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Biomass                       12         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Biomass                        12
     698.       539.      1237.     6.44     4.97    11.41     0.064    0.050
 0.114       0.456       0.003         0.000         0.000
ECAO    Biomass                        12
     364.       281.       645.     3.36     2.59     5.95     0.034    0.026
 0.060       0.238       0.002         0.000         0.000
ERCT    Biomass                        12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MACE    Biomass                         12
      35.        27.        61.     0.28     0.21     0.49     0.003    0.002
 0.005       0.020       0.000         0.000         0.000
MACW    Biomass                         12
      74.        57.       131.     0.68     0.53     1.20     0.007    0.005
 0.012       0.048       0.000         0.000         0.000
MACS    Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Biomass                         12
      52.        40.        92.     0.42     0.32     0.74     0.004    0.003
 0.007       0.030       0.000         0.000         0.000
MANO    Biomass                         12
       4.         3.         8.     0.03     0.03     0.06     0.000    0.000
 0.001       0.002       0.000         0.000         0.000
MAPP    Biomass                         12
     644.       409.      1054.     5.22     3.31     8.53     0.052    0.033
 0.085       0.341       0.002         0.000         0.000
UPNY    Biomass                         12
      78.        60.       138.     0.72     0.56     1.28     0.007    0.006
 0.013       0.051       0.000         0.000         0.000
DSNY    Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Biomass                         12
     962.       155.      1117.     8.82     1.42    10.24     0.088    0.014
 0.102       0.409       0.003         0.000         0.000
FRCC    Biomass                         12
     234.       181.       415.     2.16     1.67     3.83     0.022    0.017
 0.038       0.153       0.001         0.000         0.000
VACA    Biomass                         12
     204.       157.       361.     1.88     1.45     3.33     0.019    0.015
 0.033       0.133       0.001         0.000         0.000
TVA     Biomass                         12
       4.         3.         8.     0.04     0.03     0.07     0.000    0.000
 0.001       0.003       0.000         0.000         0.000
SOU     Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Biomass                         12
      43.        33.        77.     0.40     0.31     0.71     0.004    0.003
 0.007       0.028       0.000         0.000         0.000
SPPN    Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Biomass                         12
    1872.      1447.      3319.    17.09    13.21    30.30     0.171    0.132
 0.303       1.212       0.009         0.000         0.000
PNW     Biomass                         12
      26.        20.        46.     0.21     0.16     0.37     0.002    0.002
 0.004       0.015       0.000         0.000         0.000
AZNM    Biomass                         12
      78.        60.       138.     0.62     0.48     1.11     0.006    0.005
 0.011       0.044       0.000         0.000         0.000
RMPA    Biomass                         12
       4.         3.         7.     0.03     0.02     0.05     0.000    0.000
```

```
 0.001       0.002       0.000         0.000         0.000
NWPE    Biomass                        12
      22.        13.        34.     0.17     0.10     0.27     0.002    0.001
 0.003       0.011       0.000         0.000         0.000

Total Biomass                        12
    5398.      3490.      8888.    48.57    31.38    79.95     0.486    0.314
 0.799       3.198       0.023         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Geothermal                    13         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Geothermal                     13
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Geothermal                    13
   11344.      8966.     20310.   291.69   230.53   522.21     0.000    0.000
 0.000       0.000       0.775         0.000         0.000
PNW     Geothermal                    13
      34.        27.        61.     1.10     0.87     1.97     0.000    0.000
 0.000       0.000       0.004         0.000         0.000
AZNM    Geothermal                    13
     123.        98.       221.     3.99     3.15     7.14     0.000    0.000
 0.000       0.000       0.013         0.000         0.000
RMPA    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Geothermal                    13
    1026.       811.      1837.    32.60    25.77    58.37     0.000    0.000
 0.000       0.000       0.106         0.000         0.000

Total Geothermal                    13
   12528.      9901.     22429.   329.38   260.32   589.70     0.000    0.000
 0.000       0.000       0.898         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Landfill Gas                 14         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
               (GWh)                           (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

MECS Landfill Gas 14
22. 17. 39. 0.31 0.23 0.54 0.038 0.029
0.066 0.000 0.000 0.000 0.000
ECAO Landfill Gas 14
54. 41. 95. 0.73 0.56 1.29 0.090 0.069
0.159 0.000 0.000 0.000 0.000
ERCT Landfill Gas 14
300. 229. 528. 4.09 3.12 7.21 0.503 0.384
0.887 0.000 0.000 0.000 0.000
MACE Landfill Gas 14
107. 82. 189. 1.35 1.03 2.37 0.166 0.126
0.292 0.000 0.000 0.000 0.000
MACW Landfill Gas 14
4. 3. 8. 0.06 0.05 0.11 0.008 0.006
0.013 0.000 0.000 0.000 0.000
MACS Landfill Gas 14
18. 14. 32. 0.24 0.19 0.43 0.030 0.023
0.053 0.000 0.000 0.000 0.000
WUMS Landfill Gas 14
63. 48. 110. 0.85 0.65 1.51 0.105 0.080
0.185 0.000 0.000 0.000 0.000
MANO Landfill Gas 14
170. 130. 300. 2.32 1.77 4.09 0.285 0.218
0.503 0.000 0.000 0.000 0.000
MAPP Landfill Gas 14
49. 38. 87. 0.67 0.51 1.18 0.083 0.063
0.146 0.000 0.000 0.000 0.000
UPNY Landfill Gas 14
27. 20. 47. 0.37 0.28 0.65 0.045 0.034
0.079 0.000 0.000 0.000 0.000
DSNY Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Landfill Gas 14
81. 61. 142. 1.10 0.84 1.94 0.135 0.103
0.238 0.000 0.000 0.000 0.000
FRCC Landfill Gas 14
9. 7. 16. 0.12 0.09 0.22 0.015 0.011
0.026 0.000 0.000 0.000 0.000
VACA Landfill Gas 14
112. 85. 197. 1.53 1.16 2.69 0.188 0.143
0.331 0.000 0.000 0.000 0.000
TVA Landfill Gas 14
9. 7. 16. 0.12 0.09 0.22 0.015 0.011
0.026 0.000 0.000 0.000 0.000
SOU Landfill Gas 14
40. 31. 71. 0.55 0.42 0.97 0.068 0.052
0.119 0.000 0.000 0.000 0.000
ENTG Landfill Gas 14
27. 20. 47. 0.37 0.28 0.65 0.045 0.034
0.079 0.000 0.000 0.000 0.000
SPPN Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Landfill Gas 14
40. 31. 71. 0.55 0.42 0.97 0.068 0.052
0.119 0.000 0.000 0.000 0.000
CALI Landfill Gas 14
966. 737. 1703. 12.24 9.34 21.58 1.506 1.148

```
 2.654       0.000       0.000         0.000         0.000
PNW     Landfill Gas                   14
      94.        72.       166.     1.28     0.98     2.26     0.158    0.120
 0.278       0.000       0.000         0.000         0.000
AZNM    Landfill Gas                   14
      49.        38.        87.     0.67     0.51     1.18     0.083    0.063
 0.146       0.000       0.000         0.000         0.000
RMPA    Landfill Gas                   14
       4.         3.         8.     0.06     0.05     0.11     0.008    0.006
 0.013       0.000       0.000         0.000         0.000
NWPE    Landfill Gas                   14
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Landfill Gas                  14
    2245.      1712.      3958.    29.58    22.56    52.14     3.639    2.775
 6.413       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Wind                          15         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Wind                           15
       2.         1.         2.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Wind                           15
     164.        92.       256.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Wind                           15
    1465.       823.      2288.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Wind                           15
      20.        11.        31.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Wind                           15
      17.        10.        27.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Wind                           15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Wind                           15
      20.        11.        32.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Wind                           15
      88.        49.       137.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Wind                           15
    1443.       809.      2252.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Wind                           15
```

```
      87.        49.       136.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Wind                          15
      29.        16.        45.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Wind                          15
      27.        15.        41.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Wind                          15
      16.         9.        25.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Wind                          15
      14.         8.        22.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Wind                          15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Wind                          15
      20.        11.        31.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Wind                          15
       2.         1.         3.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Wind                          15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Wind                          15
      57.        32.        88.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Wind                          15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Wind                          15
      66.        37.       102.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Wind                          15
    4635.      2599.      7234.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Wind                          15
     185.       104.       290.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Wind                          15
     102.        57.       159.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Wind                          15
     648.       363.      1011.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Wind                          15
      62.        35.        97.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Wind                          15
    9168.      5143.     14310.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Fuel Cell                    16         (Emissions By R
```

```
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Fuel Cell                     16
       3.         8.        11.     0.03     0.06     0.08     0.005    0.011
 0.017       0.000       0.000         0.004         0.001
MACW    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Fuel Cell                     16
       1.         1.         1.     0.01     0.00     0.01     0.001    0.001
 0.002       0.000       0.000         0.000         0.000
FRCC    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
SPPN    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Fuel Cell                     16
       4.         8.        12.     0.03     0.06     0.09     0.006    0.012
 0.019       0.000       0.000         0.005         0.001
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Solar                         17         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Solar                         17
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Solar                          17
     516.       274.       790.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Solar                          17
      17.        12.        29.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Solar                          17
       5.         3.         7.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Solar                          17
      38.        20.        59.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Solar                         17
     577.       309.       886.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
```

```
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Non Fossil_Other              18         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Non Fossil_Other              18
     145.       115.       260.     1.60     1.26     2.86     0.000    0.000
 0.000       0.000       0.046         0.000         0.000
ECAO    Non Fossil_Other              18
     397.       313.       710.     4.36     3.44     7.81     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Non Fossil_Other              18
      44.        35.        79.     0.48     0.38     0.87     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Non Fossil_Other              18
    1133.       893.      2026.    12.46     9.83    22.29     0.000    0.000
 0.000       0.000       0.791         0.000         0.000
MACW    Non Fossil_Other              18
     525.       414.       938.     5.77     4.55    10.32     0.000    0.000
 0.000       0.000       0.336         0.000         0.000
MACS    Non Fossil_Other              18
     242.       191.       434.     2.67     2.10     4.77     0.000    0.000
 0.000       0.000       0.169         0.000         0.000
WUMS    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Non Fossil_Other              18
      93.        73.       166.     1.02     0.80     1.82     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Non Fossil_Other              18
     150.       118.       268.     1.65     1.30     2.95     0.000    0.000
 0.000       0.000       0.105         0.000         0.000
UPNY    Non Fossil_Other              18
     150.       118.       268.     1.65     1.30     2.95     0.000    0.000
 0.000       0.000       0.105         0.000         0.000
DSNY    Non Fossil_Other              18
     361.       285.       646.     3.98     3.14     7.11     0.000    0.000
 0.000       0.000       0.252         0.000         0.000
NYC     Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Non Fossil_Other              18
     604.       476.      1080.     6.64     5.24    11.88     0.000    0.000
 0.000       0.000       0.355         0.000         0.000
NENG    Non Fossil_Other              18
    2367.      1867.      4234.    26.04    20.53    46.57     0.000    0.000
 0.000       0.000       1.647         0.000         0.000
FRCC    Non Fossil_Other              18
    1869.      1474.      3343.    20.56    16.21    36.77     0.000    0.000
 0.000       0.000       1.120         0.000         0.000
VACA    Non Fossil_Other              18
     617.       487.      1104.     6.79     5.35    12.14     0.000    0.000
```

```
 0.000       0.000       0.431         0.000         0.000
TVA     Non Fossil_Other              18
      53.        42.        95.     0.58     0.46     1.04     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Non Fossil_Other              18
     137.       108.       244.     1.50     1.19     2.69     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Non Fossil_Other              18
     101.        80.       181.     0.48     0.38     0.87     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Non Fossil_Other              18
     785.       619.      1403.     9.00     7.10    16.10     0.000    0.000
 0.000       0.000       0.225         0.000         0.000
PNW     Non Fossil_Other              18
     256.       202.       457.     2.81     2.22     5.03     0.000    0.000
 0.000       0.000       0.102         0.000         0.000
AZNM    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Non Fossil_Other              18
   10028.      7909.     17936.   110.04    86.79   196.83     0.000    0.000
 0.000       0.000       5.684         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Fossil_Other                  19         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Fossil_Other                  19
     268.       205.       473.     2.95     2.25     5.20     0.614    0.468
 1.082       0.000       0.000         0.000         0.000
ERCT    Fossil_Other                  19
       9.         7.        16.     0.10     0.08     0.17     0.020    0.016
 0.036       0.000       0.000         0.000         0.000
MACE    Fossil_Other                  19
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Fossil_Other                  19
       9.         7.        16.     0.10     0.08     0.17     0.020    0.016
 0.036       0.000       0.000         0.000         0.000
MAPP    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Fossil_Other                  19
      89.        68.       158.     0.98     0.75     1.73     0.064    0.049
 0.114       0.000       0.000         0.000         0.000
PNW     Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
NWPE    Fossil_Other                  19
     183.       140.       323.     2.02     1.54     3.56     0.706    0.538
 1.244       0.012       0.018         0.000         0.000

Total Fossil_Other                 19
     559.       426.       985.     6.15     4.69    10.84     1.425    1.087
 2.512       0.012       0.018         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Pump Storage                  20         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Pump Storage                  20
     387.       279.       666.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Pump Storage                  20
     152.        37.       189.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Pump Storage                  20
     276.       199.       474.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Pump Storage                  20
     243.        58.       301.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Pump Storage                  20
       0.       142.       142.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Pump Storage                  20
       0.       149.       149.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
NENG    Pump Storage                  20
       0.       186.       186.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Pump Storage                  20
    1816.      1410.      3226.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Pump Storage                  20
       0.       385.       385.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Pump Storage                  20
      51.        37.        89.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Pump Storage                  20
       0.        43.        43.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Pump Storage                  20
       0.       115.       115.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Pump Storage                  20
       0.        46.        46.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Pump Storage                 20
    2925.      3085.      6010.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Int. Imports                 21         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                           (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Int. Imports                  21
```

```
    6553.      4730.     11283.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Int. Imports                  21
       1.         1.         2.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Int. Imports                  21
    8258.      5960.     14217.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Int. Imports                  21
    5638.      4069.      9706.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
PNW     Int. Imports                  21
    5465.      3944.      9408.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Int. Imports                  21
   25914.     18702.     44616.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Cgn_Coal                      22         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Cgn_Coal                      22
     186.       115.       302.     1.94     1.20     3.14     0.392    0.243
 0.634       1.570       0.006         0.292         0.080
ECAO    Cgn_Coal                      22
     577.       199.       777.     5.19     1.53     6.72     1.182    0.422
 1.603       3.054       0.009         0.625         0.171
ERCT    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Cgn_Coal                      22
     666.       538.      1204.     5.59     4.51    10.10     1.356    1.095
 2.451       5.554       0.026         0.940         0.256
MACW    Cgn_Coal                      22
    2158.      1383.      3541.    19.85    12.24    32.09     3.980    2.295
 6.275      13.980       0.083         2.988         0.815
MACS    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Cgn_Coal                      22
      61.        49.       110.     0.51     0.41     0.92     0.094    0.076
 0.171       0.459       0.003         0.089         0.024
MANO    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Cgn_Coal                      22
     312.       252.       563.     2.79     2.25     5.03     0.706    0.570
 1.276       1.283       0.009         0.469         0.128
UPNY    Cgn_Coal                      22
     704.       568.      1273.     5.84     4.71    10.55     1.022    0.744
```

```
 1.766       3.122       0.019         0.983         0.268
DSNY    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Cgn_Coal                      22
     824.       665.      1488.     7.62     6.15    13.77     1.072    0.865
 1.938       3.291       0.058         1.283         0.350
FRCC    Cgn_Coal                      22
    2643.      2133.      4777.    26.06    21.03    47.10     5.955    4.806
10.762      23.548       0.097         4.386         1.196
VACA    Cgn_Coal                      22
    4557.      3551.      8107.    40.37    31.29    71.66     7.659    5.825
13.485      36.319       0.144         6.673         1.820
TVA     Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Cgn_Coal                      22
       4.         3.         7.     0.04     0.03     0.07     0.007    0.006
 0.013       0.036       0.000         0.006         0.002
ENTG    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Cgn_Coal                      22
    1243.      1003.      2246.    10.63     8.57    19.20     2.067    1.668
 3.734       9.600       0.062         1.852         0.505
CALI    Cgn_Coal                      22
    1356.      1094.      2450.    12.37     9.98    22.36     0.557    0.449
 1.006      10.319       0.041         2.082         0.568
PNW     Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Cgn_Coal                      22
     223.       180.       402.     1.81     1.46     3.28     0.325    0.263
 0.588       1.638       0.007         0.316         0.086

Total Cgn_Coal                     22
   15514.     11733.     27248.   140.60   105.38   245.98    26.375   19.327
45.701     113.773       0.565        22.985         6.269
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Cgn_Gas                      23         (Emissions By R
egion)       Generation                    Trillion                  Emission
```

		Emission (GWh)	Emission (1000 Tons)	Emission (Tons)	Emission (Btu)			Emission (1000 Tons)		
		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER	
MECS	Cgn_Gas				23					
		496.	514.	1010.	3.43	3.67	7.10	0.308	0.270	
0.579		0.000	0.000		0.377		0.103			
ECAO	Cgn_Gas				23					
		117.	274.	392.	0.88	2.07	2.95	0.009	0.022	
0.031		0.000	0.000		0.157		0.043			
ERCT	Cgn_Gas				23					
		7185.	11686.	18871.	55.33	89.74	145.08	1.305	2.306	
3.610		0.000	0.000		7.699		2.100			
MACE	Cgn_Gas				23					
		2323.	2708.	5031.	16.23	20.04	36.27	0.530	0.802	
1.332		0.000	0.000		1.925		0.525			
MACW	Cgn_Gas				23					
		0.	55.	55.	0.00	0.51	0.51	0.000	0.046	
0.046		0.000	0.000		0.027		0.007			
MACS	Cgn_Gas				23					
		169.	143.	312.	1.66	1.40	3.06	0.066	0.056	
0.123		0.000	0.000		0.163		0.044			
WUMS	Cgn_Gas				23					
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000		0.000	0.000		0.000		0.000			
MANO	Cgn_Gas				23					
		0.	26.	26.	0.00	0.20	0.20	0.000	0.003	
0.003		0.000	0.000		0.010		0.003			
MAPP	Cgn_Gas				23					
		0.	5.	5.	0.00	0.06	0.06	0.000	0.002	
0.002		0.000	0.000		0.003		0.001			
UPNY	Cgn_Gas				23					
		0.	64.	64.	0.00	0.52	0.52	0.000	0.046	
0.046		0.000	0.000		0.028		0.008			
DSNY	Cgn_Gas				23					
		117.	126.	243.	1.10	1.19	2.29	0.103	0.111	
0.214		0.000	0.000		0.121		0.033			
NYC	Cgn_Gas				23					
		212.	162.	374.	1.92	1.47	3.40	0.178	0.136	
0.314		0.000	0.000		0.180		0.049			
LILC	Cgn_Gas				23					
		510.	343.	853.	4.51	3.09	7.61	0.406	0.277	
0.683		0.000	0.000		0.404		0.110			
NENG	Cgn_Gas				23					
		233.	335.	568.	1.92	2.75	4.67	0.116	0.159	
0.275		0.000	0.000		0.248		0.068			
FRCC	Cgn_Gas				23					
		158.	482.	640.	1.37	4.30	5.67	0.096	0.301	
0.398		0.000	0.000		0.301		0.082			
VACA	Cgn_Gas				23					
		225.	731.	957.	1.67	5.60	7.27	0.040	0.139	
0.179		0.000	0.000		0.386		0.105			
TVA	Cgn_Gas				23					
		289.	664.	953.	2.16	4.98	7.15	0.022	0.050	
0.071		0.000	0.000		0.379		0.103			
SOU	Cgn_Gas				23					
		1166.	1460.	2626.	8.80	11.12	19.92	0.109	0.161	
0.270		0.000	0.000		1.057		0.288			
ENTG	Cgn_Gas				23					
		0.	5210.	5210.	0.00	39.08	39.08	0.000	0.393	
0.393		0.000	0.000		2.074		0.566			

```
SPPN    Cgn_Gas                        23
       0.         3.         3.     0.00     0.03     0.03     0.000    0.001
 0.001       0.000       0.000         0.001         0.000
SPPS    Cgn_Gas                        23
    3536.      3337.      6874.    26.52    25.57    52.10     0.265    0.378
 0.643       0.000       0.000         2.765         0.754
CALI    Cgn_Gas                        23
   25355.     15754.     41108.   218.38   130.40   348.78     4.730    1.921
 6.651       0.000       0.000        18.510         5.048
PNW     Cgn_Gas                        23
    5024.      3854.      8878.    39.24    30.10    69.33     1.126    0.864
 1.989       0.000       0.000         3.680         1.004
AZNM    Cgn_Gas                        23
       0.       771.       771.     0.00     6.10     6.10     0.000    0.191
 0.191       0.000       0.000         0.324         0.088
RMPA    Cgn_Gas                        23
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Cgn_Gas                        23
      34.        26.        59.     0.22     0.17     0.38     0.016    0.012
 0.028       0.000       0.000         0.020         0.006

Total Cgn_Gas                       23
   47148.     48734.     95882.   385.34   384.17   769.51     9.424    8.648
18.072       0.000       0.000        40.838        11.138
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Cgn_Oil                        24         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
               (GWh)                            (Btu)                  (1000 Tons)
          (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
MANO    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Cgn_Oil                        24
       0.        17.        17.     0.00     0.14     0.14     0.000    0.021
 0.021       0.000       0.000         0.008         0.002
VACA    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Cgn_Oil                        24
    1741.      1405.      3145.    13.16    10.62    23.79     0.099    0.080
 0.178       0.000       0.000         1.262         0.344
PNW     Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Cgn_Oil                         24
    1741.      1421.      3162.    13.16    10.77    23.93     0.099    0.101
 0.199       0.000       0.000         1.270         0.346
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Cgn_Other                     25         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Cgn_Other                     25
     316.       244.       561.     1.68     1.30     2.98     0.007    0.005
 0.012       0.050       0.062         0.000         0.000
ECAO    Cgn_Other                     25
      26.        20.        46.     0.22     0.17     0.39     0.002    0.002
 0.004       0.016       0.000         0.000         0.000
ERCT    Cgn_Other                     25
      41.       252.       292.     0.25     1.50     1.75     0.045    0.307
 0.352       0.000       0.018         0.000         0.000
MACE    Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Cgn_Other                     25
     156.       121.       277.     0.83     0.64     1.48     0.004    0.003
 0.007       0.027       0.007         0.000         0.000
MACS    Cgn_Other                     25
     234.       181.       415.     0.98     0.76     1.74     0.000    0.000
 0.000       0.000       0.062         0.000         0.000
WUMS    Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Cgn_Other                     25
       9.         7.        15.     0.04     0.03     0.06     0.000    0.000
 0.000       0.000       0.002         0.000         0.000
UPNY    Cgn_Other                     25
     191.       147.       338.     2.55     1.97     4.52     0.000    0.000
 0.000       0.000       0.160         0.000         0.000
DSNY    Cgn_Other                     25
      30.        23.        54.     0.13     0.10     0.23     0.000    0.000
 0.000       0.000       0.008         0.000         0.000
NYC     Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Cgn_Other                     25
     429.       332.       761.     2.85     2.20     5.05     0.027    0.021
 0.047       0.189       0.010         0.000         0.000
FRCC    Cgn_Other                     25
     360.       278.       638.     2.99     2.31     5.30     0.023    0.017
 0.040       0.160       0.001         0.000         0.000
VACA    Cgn_Other                     25
     191.       147.       338.     1.44     1.11     2.55     0.013    0.010
 0.022       0.089       0.012         0.000         0.000
```

```
TVA     Cgn_Other                       25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Cgn_Other                       25
      22.        17.        38.     0.19     0.14     0.33     0.002    0.001
 0.003       0.013       0.000         0.000         0.000
ENTG    Cgn_Other                       25
     795.       607.      1402.     4.81     3.67     8.49     0.942    0.719
 1.661       0.021       0.083         0.000         0.000
SPPN    Cgn_Other                       25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Cgn_Other                       25
     156.       121.       277.     0.66     0.51     1.17     0.001    0.001
 0.001       0.005       0.000         0.000         0.000
CALI    Cgn_Other                       25
     576.       444.      1020.     4.10     3.16     7.26     0.078    0.060
 0.139       0.210       0.016         0.000         0.000
PNW     Cgn_Other                       25
     416.       321.       738.     3.55     2.75     6.30     0.036    0.027
 0.063       0.252       0.002         0.000         0.000
AZNM    Cgn_Other                       25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Cgn_Other                       25
      30.        18.        48.     0.24     0.14     0.38     0.002    0.001
 0.004       0.015       0.000         0.000         0.000
NWPE    Cgn_Other                       25
      43.        33.        77.     0.18     0.14     0.32     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Cgn_Other                     25
    4021.      3313.      7333.    27.70    22.61    50.31     1.181    1.175
 2.356       1.047       0.443         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: NonCG IPP_Coal                26         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
MACW NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE NonCG IPP_Coal 26

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: NonCG IPP_Gas                27         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
NENG    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: NonCG IPP_Other                28         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
ECAO NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW NonCG IPP_Other 28

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Blr_Coal                      29         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
DSNY    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Blr_Gas                      30         (Emissions By R
egion)       Generation                  Trillion                  Emission
          Emission    Emission      Emission       Emission
```

```
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Blr_Gas                        30
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Blr_Oil                        31         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
               (GWh)                            (Btu)                   (1000 Tons)
          (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MANO    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Blr_Other                     32         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Blr_Other                     32
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: SteamOnly Cogen              33         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MACW    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000

Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2005, Plant Type: Rep.Coal-CC 34 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Rep.Coal-CC 34

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Rep.O/G-CC                   35         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
ECAO    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
AZNM    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Rep.Coal-IGCC                 36         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Rep.Coal-IGCC                 36
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.Scrubber                 37         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
```

		(GWh)			(Btu)			(1000 Tons)	
		(1000 Tons)	(Tons)		(Mil Tonnes)	(Mil Tonnes)			
	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER	
MECS	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
ECAO	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
ERCT	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
MACE	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
MACW	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
MACS	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
WUMS	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
MANO	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
MAPP	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
UPNY	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
DSNY	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
NYC	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
LILC	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
NENG	Ret.Scrubber			37					
	144.	115.	259.	1.42	1.13	2.55	0.168	0.133	
0.301	0.056	0.002	0.237	0.065					
FRCC	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
VACA	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
TVA	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
SOU	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
ENTG	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
0.000	0.000	0.000	0.000	0.000					
SPPN	Ret.Scrubber			37					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	

```
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Scrubber                  37
     144.       115.       259.     1.42     1.13     2.55     0.168    0.133
 0.301       0.056       0.002         0.237         0.065
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ExistSCR & Scrub          38         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSCR & Scrub          38
    6530.      5186.     11717.    65.35    51.91   117.26    15.578    1.238
16.816       8.478       0.104        10.919         2.978
ERCT    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSCR & Scrub          38
    5245.      4166.      9411.    53.70    42.65    96.34    12.270    0.981
13.251       7.226       0.208         8.972         2.447
WUMS    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSCR & Scrub          38
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSCR & Scrub          38
    1897.      1507.      3404.    19.20    15.25    34.46     4.302    0.343
 4.645       4.307       0.032         3.209         0.875
SOU     Ret.ExistSCR & Scrub          38
    2994.      2378.      5373.    29.21    23.20    52.41     5.885    0.464
 6.349       3.930       0.114         4.880         1.331
ENTG    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR & Scrub          38
   16667.     13238.     29905.   167.46   133.00   300.46    38.035    3.026
41.061      23.942       0.458        27.980         7.631
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------

--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ExistSNCR & Scrub         39         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total          Total

MECS    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
ECAO    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
ERCT    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACE    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACW    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACS    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
WUMS    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MANO    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MAPP    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
UPNY    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
DSNY    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
NYC     Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
LILC    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
NENG    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
FRCC    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
VACA    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
TVA     Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.SCR                       40         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SCR                       40
    3279.      2604.      5883.    30.52    24.24    54.76     8.622    0.679
 9.301      27.381       0.072         5.100         1.391
ECAO    Ret.SCR                       40
   32838.     26081.     58919.   308.98   245.40   554.38    93.183    7.419  1
00.602     323.127       1.102        51.847        14.140
ERCT    Ret.SCR                       40
    6789.      6611.     13400.    68.94    67.08   136.02     1.729    1.684
 3.414      59.740       0.258        13.123         3.579
MACE    Ret.SCR                       40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.SCR                       40
```

7055. 5603. 12659. 67.03 53.23 120.26 14.947 1.331
16.278 132.285 0.709 11.199 3.054
MACS Ret.SCR 40
7665. 5100. 12765. 69.93 46.52 116.46 22.518 1.489
24.007 128.102 0.431 10.845 2.958
WUMS Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.SCR 40
982. 830. 1812. 9.70 8.20 17.90 3.022 0.254
3.276 15.003 0.030 1.667 0.455
MAPP Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.SCR 40
3407. 2706. 6114. 31.74 25.21 56.95 0.794 0.630
1.424 42.715 0.229 5.304 1.446
FRCC Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.SCR 40
5883. 4672. 10555. 56.16 44.60 100.76 16.570 1.322
17.892 52.735 0.239 9.563 2.608
ENTG Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Ret.SCR 40
67899. 54207. 122105. 643.00 514.49 1157.49 161.385 14.808 1
76.193 781.087 3.069 108.647 29.631

NOx
SO2 MER CO2 Carbon
Year: 2005, Plant Type: Ret.ExistScrub & SCR 41 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.ExistScrub & SCR 41
23586. 18732. 42318. 231.16 183.59 414.75 58.499 5.086
63.586 69.210 0.552 38.623 10.534
ERCT Ret.ExistScrub & SCR 41
7792. 6652. 14443. 80.54 68.69 149.23 2.013 1.717
3.731 29.251 0.356 14.552 3.969
MACE Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.ExistScrub & SCR 41
7055. 5603. 12659. 64.84 51.50 116.33 14.329 1.287
15.617 9.102 0.345 10.833 2.955
MACS Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ExistScrub & SCR 41
1519. 1206. 2725. 15.22 12.09 27.30 4.763 0.381
5.144 7.523 0.023 2.543 0.693
MAPP Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ExistScrub & SCR 41
273. 221. 494. 2.65 2.14 4.78 0.066 0.053

```
 0.120       0.359       0.004         0.445         0.121
FRCC    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistScrub & SCR          41
    1121.       890.      2011.    11.07     8.79    19.86     3.133    0.251
 3.383       2.801       0.026         1.850         0.504
TVA     Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub & SCR          41
   41346.     33304.     74650.   405.47   326.80   732.27    82.804    8.776
91.580     118.245       1.306        68.846        18.776
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.SNCR                     42         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SNCR                      42
```

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
AZNM    Ret.SNCR                        42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SNCR                        42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SNCR                        42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SNCR                        42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ExistScrub & SNCR         43         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.SCR+Scrb                 44         (Emissions By R
egion)       Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
```

		(1000 Tons)			(Tons)			(Mil Tonnes)			(Mil Tonnes)	
		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER	Total Total	WINTER	SUMMER			
MECS	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
ECAO	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
ERCT	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
MACE	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
MACW	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
MACS	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
WUMS	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
MANO	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
MAPP	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
UPNY	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
DSNY	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
NYC	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
LILC	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
NENG	Ret.SCR+Scrb				44							
		485.	385.	870.	4.77	3.79	8.56	0.119	0.095	0.214	0.188	0.002
FRCC	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
VACA	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
TVA	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
SOU	Ret.SCR+Scrb				44							
		3728.	2961.	6689.	37.07	29.44	66.51	9.362	0.744	10.107	4.988	0.136
ENTG	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
SPPN	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000

```
SPPS    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SCR+Scrb                  44
    4213.      3346.      7559.    41.84    33.23    75.06     9.482    0.839
10.321       5.176       0.138         6.990         1.906
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.SNCR+Scrub                45         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
```

NOx
SO2 MER CO2 Carbon
Year: 2005, Plant Type: Ret.Gas Reburn 46 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
SOU     Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ExistScrub+GasR          47         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
MACS Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2005, Plant Type: Ret.GasReburn+Scrub 48 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
FRCC    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ACI                        49         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
ERCT Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.ACI 49

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI                          49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ExistScrub&ACI            50         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
NYC     Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ExistSCR&ACI              51         (Emissions By R
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)
```

		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
ECAO	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
ERCT	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MACE	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MACW	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MACS	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
WUMS	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MANO	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MAPP	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
UPNY	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
DSNY	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
NYC	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
LILC	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
NENG	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
FRCC	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
VACA	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
TVA	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
SOU	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
ENTG	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
SPPN	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
SPPS	Ret.ExistSCR&ACI				51				

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ExistSNCR&ACI            52         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MAPP    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

```
                                                                                                                NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ACI & SCR                 53         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total          Total

MECS    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
ECAO    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
ERCT    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACE    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACW    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACS    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
WUMS    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MANO    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MAPP    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
UPNY    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
DSNY    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
NYC     Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
LILC    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
NENG    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
FRCC    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
VACA    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
TVA     Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
SOU     Ret.ACI & SCR                 53
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ExistScrub&ACI&SCR        54         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub&ACI&SCR         54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub&ACI&SCR         54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistScrub&ACI&SCR         54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub&ACI&SCR         54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub&ACI&SCR         54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MACS    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub&ACI&SCR        54
```

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2005, Plant Type: Ret.ACI & SNCR 55 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ACI & SNCR 55

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ExistScrub&ACI&SNCR       56         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub&ACI&SNCR        56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub&ACI&SNCR        56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

ERCT Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ACI & Srub                57         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ACI & Srub                57
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ExistSCR&ACI&Scrub        58         (Emissions By R
egion)       Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)
```

		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
ECAO	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
ERCT	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MACE	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MACW	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MACS	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
WUMS	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MANO	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MAPP	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
UPNY	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
DSNY	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
NYC	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
LILC	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
NENG	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
FRCC	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
VACA	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
TVA	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
SOU	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
ENTG	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
SPPN	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
SPPS	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000

```
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ExistSNCR&ACI&Scrub       59         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSNCR&ACI&Scrub       59
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

```
                                                                                                                NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ExistSNCR&ExistScrub&ACI  60         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.ExistSCR&ExistScrub&ACI   61         (Emissions By R
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSCR&ExistScrub&ACI   61
```

```
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2005, Plant Type: Ret.ExistNOx&ExistScrub&ACI 62 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.SCR & Scrub & ACI         63         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.SCR & Scrub & ACI         63
```

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

RMPA Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2005, Plant Type: Ret.SNCR & Scrub & ACI 64 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.O/G SCR                  65         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                            (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
```

Total	Total	Total	Total	Total						
MECS	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
ECAO	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
ERCT	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MACE	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MACW	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MACS	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
WUMS	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MANO	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MAPP	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
UPNY	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
DSNY	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
NYC	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
LILC	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
NENG	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
FRCC	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
VACA	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
TVA	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
SOU	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
ENTG	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
SPPN	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
SPPS	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000

```
CALI    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.O/G SNCR                 66         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.O/G SNCR                 66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
```

```
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.Nuclear (age 30+10 yrs)   67         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
ENTG    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Ret.Nuclear (age 40+20 yrs)   68         (Emissions By R
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------
              (GWh)                         (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```


NOx
SO2 MER CO2 Carbon
Year: 2005, Plant Type: Ret. Biomass Cofiring 69 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
VACA    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: CT Early Retirement           70         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
MACE CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA CT Early Retirement 70

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: CC Early Retirement           71         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

LILC CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2005, Plant Type: O/G Early Retirement 72 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI O/G Early Retirement 72

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, Plant Type: Coal Early Retirement         73         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
UPNY    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2           Carbon
```

Year: 2005, Plant Type: Nuke Early Retirement 74 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
ECAO	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
ERCT	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MACE	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MACW	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MACS	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
WUMS	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MANO	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MAPP	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
UPNY	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
DSNY	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
NYC	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
LILC	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
NENG	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
FRCC	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
VACA	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
TVA	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
SOU	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
ENTG	Nuke Early Retirement			74				

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2005, System Totals (By Region)Generation Trillion
             Emission                      Emission                  Emission
          Emission    Emission
------------------------------------ (GWh)
              (Btu)                        (1000 Tons)              (1000 Tons)
          (Tons)      (Mil Tonnes)(Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Region MECS
   61860.     44829.    106688.   535.13   387.64   922.77    76.487   34.111  1
10.597     336.629       1.428        69.277        18.894
Region ECAO
  303945.    219575.    523521.  2938.84  2116.36  5055.20   636.859  186.599  8
23.458    2072.657       8.358       426.660       116.362
Region ERCT
  144043.    138531.    282574.  1281.39  1242.67  2524.06    67.739   76.862  1
44.601     392.487       2.533       154.898        42.245
Region MACE
   65689.     49623.    115312.   635.94   477.81  1113.75    36.410   13.080
49.490      80.978       1.793        29.873         8.147
Region MACW
   60518.     42811.    103329.   568.52   403.80   972.31    84.943   17.180  1
02.123     441.988       3.018        64.117        17.486
Region MACS
   27104.     19411.     46515.   269.57   193.79   463.36    46.591    8.301
54.893     195.607       1.061        27.783         7.577
```

```
Region WUMS
   35608.     27960.     63568.   358.77   283.97   642.75    48.316   38.803
87.119     204.040       1.145        48.722        13.288
Region MANO
  128416.     91117.    219533.  1308.44   925.25  2233.70   137.036   69.955  2
06.991     523.098       2.600       106.208        28.966
Region MAPP
   94002.     74124.    168126.   922.30   726.56  1648.86   157.704  126.245  2
83.949     475.852       3.475       130.559        35.607
Region UPNY
   50430.     36643.     87073.   270.84   206.70   477.54    25.249   10.237
35.486     162.100       1.369        20.339         5.547
Region DSNY
   20117.     16175.     36292.   172.00   139.37   311.37     6.638    4.012
10.649      25.634       0.344        10.283         2.804
Region NYC
    7631.      7707.     15338.    70.10    71.50   141.60     4.602    4.746
 9.347       0.000       0.000         7.515         2.049
Region LILC
    4156.      4837.      8993.    42.61    50.50    93.11     1.724    2.240
 3.964       0.000       0.355         4.311         1.176
Region NENG
   76760.     55389.    132149.   593.91   432.13  1026.04    20.435    8.780
29.215     122.989       2.372        39.879        10.876
Region FRCC
   91458.     84342.    175800.   854.30   774.02  1628.32   101.575   83.741  1
85.316     230.608       2.010        95.069        25.928
Region VACA
  175102.    131736.    306838.  1647.02  1248.87  2895.89   180.790   67.092  2
47.882     874.706       3.004       153.859        41.962
Region TVA
  102641.     76610.    179251.   912.26   691.23  1603.49   155.972   38.628  1
94.599     405.787       1.439       101.101        27.573
Region SOU
  144233.    120508.    264740.  1340.19  1116.36  2456.55   192.542   86.781  2
79.323     900.120       2.998       170.832        46.591
Region ENTG
   62338.     63128.    125466.   634.30   603.71  1238.01    65.466   41.389  1
06.854     203.181       1.711        66.134        18.036
Region SPPN
   41299.     33384.     74683.   421.43   340.22   761.65    78.888   60.200  1
39.089     124.555       1.573        63.338        17.274
Region SPPS
   67129.     63045.    130174.   574.75   535.43  1110.18    74.871   61.155  1
36.026     265.251       1.986        91.121        24.851
Region CALI
  126390.     93044.    219434.  1116.57   784.77  1901.33    11.409    6.793
18.202      18.728       1.093        51.860        14.144
Region PNW
  106370.     81496.    187866.   340.08   272.76   612.84    22.365   18.836
41.202      21.413       0.440        33.243         9.066
Region AZNM
   88986.     74470.    163456.   805.43   664.51  1469.94    95.195   76.127  1
71.322      97.569       1.129        91.105        24.847
Region RMPA
   30746.     24338.     55084.   273.51   210.04   483.55    55.804   43.215
99.019      76.979       0.455        45.468        12.400
Region NWPE
   55830.     40966.     96796.   565.68   408.90   974.58   112.118   81.027  1
93.145     103.560       1.054        85.818        23.405

System Total
 2172804.   1715796.   3888600. 19453.88 15308.88 34762.77  2497.729 1266.132 37
63.861    8356.515      48.743      2189.370       597.101
-------------------------------------------------------------------------------
```


(**) Industrial Boiler generation not included in generation totals

---

NOx
SO2 MER CO2 Carbon
Year: 2005, System Totals (Emissions By Plant Type)Generation Trillion
Emission Emission Emission Emission
Emission Emission
---------- (GWh)
(Btu) (1000 Tons) (1000 Tons)
(Tons) (Mil Tonnes)(Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
113162. 89612. 202774. 1103.21 873.31 1976.51 262.254 45.297 3
07.550 217.369 3.020 184.200 50.236
Total Scrubbed Coal 2
249790. 193267. 443057. 2586.17 2000.58 4586.75 519.533 402.305 9
21.838 767.135 8.060 434.987 118.633
Total Unscrubbed Coal_NOx 3
178664. 137518. 316182. 1693.76 1301.69 2995.45 403.535 57.065 4
60.601 2033.695 6.658 280.052 76.378
Total Unscrubbed Coal 4
478876. 337113. 815989. 4795.26 3374.67 8169.93 940.297 643.896 15
84.193 4291.780 18.390 773.916 211.068
Total Oil/Gas Steam 5
21023. 23926. 44949. 201.54 234.02 435.56 6.435 21.489
27.924 0.000 0.000 23.115 6.304
Total Oil/Gas Steam_Nox 6
103. 1406. 1509. 0.97 13.94 14.91 0.006 0.929
0.935 0.000 0.000 0.791 0.216
Total Nuclear 7
448862. 336724. 785586. 4730.98 3549.37 8280.35 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
154390. 114990. 269380. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
249918. 246430. 496348. 1893.45 1869.74 3763.19 26.731 27.276
54.006 0.000 0.000 199.714 54.467
Total IGCC 10
2652. 2050. 4702. 19.30 14.91 34.21 0.902 0.697
1.598 0.000 0.010 3.185 0.869
Total Turbine 11
7326. 12665. 19991. 79.52 139.27 218.79 3.528 6.159
9.688 0.000 0.000 11.611 3.167
Total Biomass 12
5398. 3490. 8888. 48.57 31.38 79.95 0.486 0.314
0.799 3.198 0.023 0.000 0.000
Total Geothermal 13
12528. 9901. 22429. 329.38 260.32 589.70 0.000 0.000
0.000 0.000 0.898 0.000 0.000
Total Landfill Gas 14
2245. 1712. 3958. 29.58 22.56 52.14 3.639 2.775
6.413 0.000 0.000 0.000 0.000
Total Wind 15
9168. 5143. 14310. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Fuel Cell 16
4. 8. 12. 0.03 0.06 0.09 0.006 0.012
0.019 0.000 0.000 0.005 0.001
Total Solar 17
577. 309. 886. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
10028. 7909. 17936. 110.04 86.79 196.83 0.000 0.000
0.000 0.000 5.684 0.000 0.000
Total Fossil_Other 19
559. 426. 985. 6.15 4.69 10.84 1.425 1.087
2.512 0.012 0.018 0.000 0.000
Total Pump Storage 20
2925. 3085. 6010. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
25914. 18702. 44616. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
15514. 11733. 27248. 140.60 105.38 245.98 26.375 19.327
45.701 113.773 0.565 22.985 6.269
Total Cgn_Gas 23
47148. 48734. 95882. 385.34 384.17 769.51 9.424 8.648
18.072 0.000 0.000 40.838 11.138
Total Cgn_Oil 24
1741. 1421. 3162. 13.16 10.77 23.93 0.099 0.101
0.199 0.000 0.000 1.270 0.346
Total Cgn_Other 25
4021. 3313. 7333. 27.70 22.61 50.31 1.181 1.175
2.356 1.047 0.443 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
144. 115. 259. 1.42 1.13 2.55 0.168 0.133

```
 0.301       0.056       0.002         0.237         0.065
Total Ret.ExistSCR & Scrub          38
   16667.     13238.     29905.   167.46   133.00   300.46    38.035    3.026
41.061      23.942       0.458        27.980         7.631
Total Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                       40
   67899.     54207.    122105.   643.00   514.49  1157.49   161.385   14.808  1
76.193     781.087       3.069       108.647        29.631
Total Ret.ExistScrub & SCR          41
   41346.     33304.     74650.   405.47   326.80   732.27    82.804    8.776
91.580     118.245       1.306        68.846        18.776
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
    4213.      3346.      7559.    41.84    33.23    75.06     9.482    0.839
10.321       5.176       0.138         6.990         1.906
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

System Total
 2172804.   1715796.   3888600. 19453.88 15308.88 34762.77  2497.729 1266.132 37
63.861    8356.515      48.743      2189.370       597.101
System Total Without Imports
 2146890.   1697094.   3843984. 19453.88 15308.88 34762.77  2497.729 1266.132 37
63.861    8356.515      48.743      2189.370       597.101
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler generation in BBtu, not included in generation totals


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-----------------------------------------------------------------------------
Year: 2010, Region: MECS     (Emissions By Plant)
```

```
-------------------------------------------------

            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
  MECS  TCOLE0411391030308 01              BD1: 5.1 0.39  0.33  0.25    20.   0.
  43.30  3.85  3.85       83.        66.       149.     0.86     0.69     1.55
   0.168    0.134    0.302       0.258       0.000         0.144         0.039
Scrubbed Coal                  2
  MECS  TSXBS0432392020103 01              BD1: 5.1 0.30  0.07  1.72    65.   0.
  35.60  2.94  2.94      270.       179.       449.     2.97     1.98     4.95
   0.446    0.296    0.742       0.178       0.004         0.461         0.126
  MECS  TSXBS0432392020203 01              BD1: 5.1 0.33  0.12  2.94    50.   0.
  35.60  2.94  2.94      174.       138.       312.     2.03     1.62     3.65
   0.336    0.267    0.602       0.222       0.005         0.340         0.093
Unscrubbed Coal_NOx            3
  MECS  TSJBO0412392020202 01              BB2: 4.1 0.24  1.00  3.69    20.   0.
  32.30  1.54  1.54       83.        66.       149.     0.92     0.73     1.66
   0.111    0.088    0.199       0.829       0.003         0.154         0.042
  MECSMITSFSC0441392020101 01              SB1: 4.5 0.04  1.00  4.41  3000.   0.
  27.00  2.51  2.51    12450.      9888.     22339.   114.47    90.91   205.38
   2.060    1.636    3.697     102.692       0.453        19.815         5.404
Unscrubbed Coal                4
  MECS  TCOLU0411392050710 01              BB2: 4.1 0.40  1.00  4.10    22.   0.
  31.80  1.54  1.54       91.        73.       164.     0.95     0.75     1.70
   0.189    0.150    0.339       0.850       0.003         0.158         0.043
  MECS  TCOLU0431152020110 01              BB2: 4.1 0.46  1.00  2.62    45.   0.
  32.00  1.54  1.54      120.        95.       215.     1.25     0.99     2.24
   0.287    0.228    0.515       1.120       0.003         0.209         0.057
  MECS  TCOLU0431392020110 01              BB2: 4.1 0.40  1.00  2.62   253.   0.
  32.00  1.54  1.54     1050.       699.      1749.    10.92     7.26    18.18
   2.184    1.453    3.637       9.092       0.024         1.693         0.462
  MECS  TSASU0441392020110 01              SB1: 4.5 0.26  0.67  4.41  1260.   0.
  17.40  1.54  1.54     5229.      4153.      9382.    51.48    40.88    92.36
   6.615    5.254   11.868      30.802       0.204         8.911         2.430
  MECS  TSBBU0441392020110 01              BB2: 4.1 0.36  1.00  2.62   500.   0.
  32.00  1.54  1.54     2075.      1648.      3723.    18.96    15.06    34.02
   3.385    2.688    6.073      17.011       0.045         3.168         0.864
  MECS  TSBSU0441392020110 01              SB1: 4.5 0.31  1.00  4.41  1894.   0.
  29.20  1.54  1.54     7860.      5229.     13090.    75.92    50.51   126.42
  11.881    7.904   19.785      63.211       0.279        12.197         3.326
  MECS  TSEBU0441392020110 01              BB2: 4.1 0.30  1.00  2.62   320.   0.
  32.00  1.54  1.54     1328.      1055.      2383.    13.06    10.38    23.44
   1.960    1.556    3.516      11.720       0.031         2.183         0.595
  MECSMITSGBU0431392020110 01              BB2: 4.1 0.41  1.00  2.62   190.   0.
  32.00  1.54  1.54      789.       525.      1313.     7.92     5.27    13.19
   1.640    1.091    2.730       6.595       0.017         1.228         0.335
  MECSMITSGBU0432391050210 01              BB1: 3.4 0.55  1.00  3.41    27.   0.
  26.40  1.54  1.54       72.        57.       129.     0.90     0.72     1.62
   0.246    0.195    0.441       0.808       0.003         0.150         0.041
  MECSMITSGBU0441392020110 01              BB2: 4.1 0.36  1.00  2.62   945.   0.
  32.00  1.54  1.54     3922.      3115.      7037.    37.66    29.91    67.57
   6.854    5.444   12.298      33.787       0.089         6.293         1.716
  MECS  TSIBU0432392020110 01              BB2: 4.1 0.30  1.00  2.62    53.   0.
  32.00  1.54  1.54      220.       146.       366.     2.41     1.60     4.02
   0.365    0.243    0.609       2.008       0.005         0.374         0.102
```

```
  MECS  TSIBU0441392020110 01                BB2: 4.1 0.43  1.00  2.62   103.   0.
  26.40  1.54  1.54      427.       284.       712.     4.39     2.92     7.32
   0.947    0.630    1.576       3.658       0.010         0.681         0.186
  MECS  TSIBU0442392020110 01                BB2: 4.1 0.30  1.00  2.62   236.   0.
  32.00  1.54  1.54      820.       500.      1320.     9.55     5.82    15.37
   1.433    0.873    2.306       7.687       0.020         1.432         0.390
  MECS  TSKBU0412391020710 01                BB2: 4.1 0.81  1.00  4.10    21.   0.
  32.00  1.54  1.54       87.        69.       156.     1.09     0.87     1.95
   0.443    0.352    0.795       0.977       0.004         0.182         0.050
  MECS  TSKBU0412391050710 01                BB2: 4.1 1.67  1.00  4.10    15.   0.
  26.40  1.54  1.54       62.        49.       112.     0.75     0.59     1.34
   0.625    0.497    1.122       0.670       0.003         0.125         0.034
  MECSMITSLBU0432152020110 01                BB2: 4.1 0.36  1.00  2.62   318.   0.
  29.30  1.54  1.54      848.       674.      1522.     9.18     7.29    16.46
   1.647    1.308    2.955       8.231       0.022         1.533         0.418
  MECSMITSLBU0441152020110 01                BB2: 4.1 0.44  1.00  2.62   156.   0.
  26.40  1.54  1.54      542.       331.       873.     5.23     3.19     8.42
   1.156    0.704    1.860       4.208       0.011         0.784         0.214
Oil/Gas Steam                    5
  MECS  STHSU0421   000000 00                GAS      0.20  0.00  0.00  1035.   0.
  17.10  2.57  2.57     1053.       570.      1623.    10.10     5.46    15.56
   1.005    0.544    1.548       0.000       0.000         0.826         0.225
Oil/Gas Steam_Nox                6
Nuclear                          7
  MECS  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1110.   0.
 109.80  0.75  0.75     4676.      4072.      8748.    60.17    52.40   112.57
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  MECS  HYDRO00     000000 00                HYDRO    0.00  0.00  0.00   158.   0.
  15.40  0.00  0.00      618.       395.      1013.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  MECS  CC   0413   000000 00                GAS      0.17  0.00  0.00    42.   0.
  19.40  0.00  1.03        0.         7.         7.     0.00     0.07     0.07
   0.000    0.006    0.006       0.000       0.000         0.004         0.001
  MECS  CC   0422   000000 00                GAS      0.02  0.00  0.00  1456.   0.
  13.90  1.03  1.03     2936.      2199.      5134.    22.02    16.49    38.51
   0.220    0.165    0.385       0.000       0.000         2.044         0.557
IGCC                            10
Turbine                         11
  MECS  CT   0411   000000 00                GAS      0.11  0.00  0.00     9.   0.
  11.20  1.03  1.03        2.         2.         4.     0.02     0.01     0.03
   0.001    0.001    0.002       0.000       0.000         0.002         0.000
  MECS  CT   0412   000000 00                GAS      0.10  0.00  0.00   152.   0.
   4.00  0.00  1.03        0.        26.        26.     0.00     0.28     0.28
   0.000    0.014    0.014       0.000       0.000         0.015         0.004
  MECS  CT   0422   000000 00                GAS      0.08  0.00  0.00  2392.   0.
   2.80  0.00  1.03        0.        42.        42.     0.00     0.46     0.46
   0.000    0.019    0.019       0.000       0.000         0.025         0.007
Biomass                         12
  MECS  BIOMS00  42 000000 00                B1-: 0.6 0.02  0.08  0.57   161.   0.
  44.80  5.36  5.36      698.       539.      1237.     6.44     4.97    11.41
   0.064    0.050    0.114       0.456       0.003         0.000         0.000
Geothermal                      13
Landfill Gas                    14
  MECS  LFGAS00     000000 00                WASTE    0.25  0.00  0.00     5.   0.
  78.60 10.48 10.48       22.        17.        39.     0.31     0.23     0.54
   0.038    0.029    0.066       0.000       0.000         0.000         0.000
Wind                            15
  MECS  WIND 00     000000 00                NONE     0.00  0.00 71.00     1.   0.
  26.40  0.00  0.00        2.         1.         2.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
```

```
  MECS  OTHER00     000000 00              NONE     0.00  0.00  0.00    18.   0.
 103.60  0.00  0.00       79.        63.       142.     0.87     0.69     1.56
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MECS  OTHER00     000000 00              NONE     0.00  0.00 71.00    15.   0.
 103.60  0.00  0.00       66.        52.       118.     0.73     0.57     1.30
   0.000    0.000    0.000       0.000       0.046         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
  MECS  PUMPS00     000000 00              NONE     0.00  0.00 71.00  1872.   0.
   6.50  0.00  0.00      387.       839.      1226.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
  MECS  MIIMP00     000000 00              NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00      122.        88.       210.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                       22
  MECS  CGCOU0431392050710 01              BB1: 3.4 0.40  1.00  3.41    55.   0.
  11.70  1.54  1.54      223.       151.       373.     2.31     1.56     3.88
   0.468    0.316    0.784       1.940       0.007         0.361         0.099
Cgn_Gas                        23
  MECS  CGCC 0413   000000 00              GAS      0.18  0.00  0.00    57.   0.
  13.90  1.03  1.03       13.        10.        23.     0.12     0.09     0.21
   0.011    0.008    0.019       0.000       0.000         0.011         0.003
  MECS  CGCC 0421   000000 00              GAS      0.18  0.00  0.00   738.   0.
  13.90  1.03  1.03     1488.      1141.      2629.    10.28     7.89    18.17
   0.925    0.710    1.635       0.000       0.000         0.964         0.263
  MECS  CGCC 0422   000000 00              GAS      0.05  0.00  0.00   724.   0.
  13.90  1.03  1.03      487.       373.       859.     3.76     2.88     6.63
   0.101    0.078    0.179       0.000       0.000         0.352         0.096
  MECS  CGCC 0423   000000 00              GAS      0.18  0.00  0.00   977.   0.
  13.90  0.00  1.03        0.       167.       167.     0.00     1.66     1.66
   0.000    0.149    0.149       0.000       0.000         0.088         0.024
Cgn_Oil                        24
Cgn_Other                      25
  MECS  CGBIO00  42 000000 00              B1-: 0.6 0.02  0.08  0.57    19.   0.
  44.80  5.36  5.36       82.        64.       146.     0.70     0.54     1.25
   0.007    0.005    0.012       0.050       0.000         0.000         0.000
  MECS  CGOTH00     000000 00              NONE     0.00  0.00 71.00    54.   0.
 103.60  0.00  0.00      234.       181.       415.     0.98     0.76     1.74
   0.000    0.000    0.000       0.000       0.062         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  MECS  TSABU0441391020110 01     SCR2     BB2: 4.1 0.06  1.00  2.62   790.   6.
  22.70  2.39  2.39     3279.      2604.      5883.    30.52    24.24    54.76
   0.855    0.679    1.533      27.381       0.072         5.100         1.391
  MECS  TSDBU0441392020110 01     SCR1     BB2: 4.1 0.05  1.00  2.62   609.   9.
  32.50  2.49  2.49     2527.      2007.      4535.    23.74    18.86    42.60
   0.594    0.471    1.065      21.298       0.056         3.967         1.082
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
```

```
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: ECAO     (Emissions By Plant)
--------------------------------------------------
```

	NOx			SO2		MER	CO2	Carbon
			Generation				Trillion	
	Emission			Emission	Emission		Emission	Emission
							(lb/MBtu)	(lb/TBtu)
/KWyr	VOM Mill/KWh		(GWh)				(Btu)	
	(1000 Tons)			(1000 Tons)	(Tons)		(Mil Tonnes)	(Mil Tonnes)
Unit					Fuel	NOx	SO2 MERCURY	Cap. Cap
. FO&M WINT. SUMM.		WINTER		SUMMER	Total	WINTER	SUMMER	Total
WINTER	SUMMER	Total		Total	Total		Total	Total
Scrubbed Coal_NOx			1					
ECAO TSXBD0241041020207 01					BG1: 8.0	0.40	0.40 4.66	171. 0.
43.10 3.85 3.85		710.		564.	1273.	7.44	5.91	13.35
1.492	1.185	2.677		2.637	0.031		1.243	0.339
ECAO TSYBA0441192020105 01					BG1: 8.0	0.05	0.25 0.80	500. 0.
36.20 3.91 3.91		2075.		1648.	3723.	21.59	17.14	38.73
0.518	0.411	0.930		4.841	0.016		3.607	0.984
ECAOOHTSYBA0441041020105 01					BG1: 8.0	0.06	0.25 0.80	2600. 0.
43.30 3.91 3.91		0.		8570.	8570.	0.00	81.83	81.83
0.000	2.373	2.373		10.228	0.033		7.620	2.078
ECAOOHTSYBA0441041020105 01					BG2:17.4	0.06	0.25 1.74	2600. 0.

43.30 3.91 3.91 10790. 0. 10790. 103.03 0.00 103.03
2.988 0.000 2.988 12.878 0.090 9.594 2.617
ECAO TSXBA0641202020105 01 BG1: 8.0 0.04 0.25 0.80 1717. 0.
33.00 3.91 3.91 7126. 5659. 12785. 72.03 57.21 129.23
1.585 1.259 2.843 16.154 0.052 12.035 3.282
ECAO TSXBA0641202020205 01 BG1: 8.0 0.03 0.25 0.80 600. 0.
36.20 3.91 3.91 2490. 1978. 4468. 24.76 19.67 44.43
0.421 0.334 0.755 5.554 0.018 4.138 1.128
ECAO TSZBA0641051020105 01 BG1: 8.0 0.05 0.25 0.80 1920. 0.
43.30 3.91 3.91 7968. 6329. 14297. 75.44 59.92 135.36
1.886 1.498 3.384 16.920 0.054 12.605 3.438
ECAO TCOLA0641202020105 01 BG1: 8.0 0.01 0.25 0.80 268. 0.
23.60 3.91 3.91 1112. 883. 1996. 10.01 7.95 17.96
0.055 0.044 0.099 2.245 0.007 1.673 0.456
ECAO TSXBE0232041020207 01 BG1: 8.0 0.39 0.40 4.66 194. 0.
43.30 3.85 3.85 674. 411. 1085. 8.22 5.01 13.24
1.620 0.987 2.608 2.614 0.031 1.233 0.336
ECAO TSXBE0242041020207 01 BG1: 8.0 0.38 0.40 4.66 109. 0.
43.30 3.85 3.85 452. 301. 753. 4.91 3.27 8.18
0.941 0.626 1.567 1.657 0.019 0.762 0.208
ECAO TSVBA0641201010105 01 BG1: 8.0 0.07 0.25 0.80 141. 0.
43.50 3.91 3.91 585. 465. 1050. 5.86 4.66 10.52
0.217 0.172 0.389 1.315 0.004 0.979 0.267
ECAOINTSVBA0441181020105 01 BG1: 8.0 0.05 0.25 0.80 619. 0.
36.20 3.91 3.91 2569. 2040. 4609. 25.98 20.63 46.61
0.662 0.526 1.189 5.827 0.019 4.341 1.184
ECAOINTSVBA0441182020105 01 BG1: 8.0 0.04 0.25 0.80 865. 0.
41.80 3.91 3.91 3590. 2851. 6441. 35.86 28.48 64.33
0.789 0.627 1.415 8.042 0.026 5.991 1.634
Scrubbed Coal 2
ECAO TCOLS0231411020703 01 BE3:18.4 0.80 0.26 8.29 176. 0.
43.00 2.94 2.94 612. 486. 1098. 6.36 5.05 11.42
2.545 2.022 4.567 1.507 0.047 1.063 0.290
ECAO TCOLS0611182020703 01 BG1: 8.0 0.46 0.90 4.66 53. 0.
43.00 2.94 2.94 220. 175. 395. 2.29 1.82 4.10
0.526 0.418 0.944 1.847 0.010 0.382 0.104
ECAO TCOLS0631041050303 01 BE2:10.4 0.55 0.53 0.31 84. 0.
23.10 2.94 2.94 349. 232. 581. 3.63 2.41 6.04
1.001 0.666 1.666 1.594 0.001 0.562 0.153
ECAOOHTOLBS0432142020304 01 BG2:17.4 0.34 1.09 0.87 49. 0.
42.70 2.94 2.94 170. 104. 274. 2.10 1.28 3.38
0.363 0.221 0.584 1.836 0.001 0.315 0.086
ECAO TSVBS0641202020103 01 BG1: 8.0 0.42 0.25 2.73 401. 0.
42.70 2.94 2.94 1664. 1322. 2986. 15.62 12.40 28.02
3.264 2.592 5.856 3.503 0.038 2.609 0.712
ECAOINTSVBS0431182020103 01 BG1: 8.0 0.23 0.30 2.73 85. 0.
43.00 2.94 2.94 353. 280. 633. 3.17 2.52 5.68
0.360 0.286 0.645 0.853 0.008 0.529 0.144
ECAOINTSVBS0432181020103 01 BG1: 8.0 0.50 0.30 2.73 90. 0.
43.00 2.94 2.94 374. 297. 670. 4.38 3.48 7.85
1.094 0.869 1.964 1.178 0.011 0.731 0.199
ECAO TSXBS0441142020103 01 BE2:10.4 0.30 0.26 3.55 750. 0.
41.70 2.94 2.94 3113. 2472. 5585. 31.77 25.23 57.00
4.765 3.785 8.550 7.524 0.101 5.308 1.448
ECAO TSYBS0432192020204 01 BE1: 6.1 0.37 0.42 3.65 63. 0.
42.70 2.94 2.94 261. 208. 469. 2.92 2.32 5.24
0.546 0.434 0.980 1.112 0.010 0.488 0.133
ECAO TSZBS0431142010103 01 BE1: 6.1 0.46 0.44 2.80 69. 0.
43.00 2.94 2.94 240. 191. 430. 2.48 1.97 4.45
0.568 0.451 1.020 0.980 0.006 0.415 0.113
Unscrubbed Coal_NOx 3
ECAO TSBBN0241041020102 01 BA2: 5.2 0.35 1.10 3.31 500. 0.
26.60 2.45 2.45 638. 507. 1145. 6.10 4.85 10.95
1.068 0.848 1.916 6.021 0.018 1.019 0.278
ECAO TSBBN0241041020102 01 BD1: 5.1 0.35 1.50 3.24 500. 0.

26.60 2.45 2.45 459. 365. 824. 4.39 3.49 7.88
0.769 0.611 1.379 5.911 0.013 0.734 0.200
ECAO TSBBN0241042020102 01 BA2: 5.2 0.25 1.10 3.31 343. 0.
32.20 2.45 2.45 693. 551. 1244. 6.78 5.38 12.16
0.833 0.662 1.495 6.687 0.020 1.132 0.309
ECAO TSBBN0241042020102 01 BD1: 5.1 0.25 1.50 3.24 343. 0.
32.20 2.45 2.45 499. 396. 896. 4.88 3.87 8.75
0.600 0.477 1.077 6.565 0.014 0.815 0.222
ECAO TSDBC0641061020101 01 BD1: 5.1 0.06 1.50 3.24 800. 0.
27.00 2.51 2.51 2964. 2354. 5319. 27.39 21.75 49.15
0.863 0.685 1.548 36.859 0.080 4.577 1.248
ECAOOHTSDBN0441042020102 01 BE2:10.4 0.23 2.20 6.69 163. 0.
32.20 2.45 2.45 567. 345. 912. 5.34 3.25 8.59
0.627 0.382 1.009 9.445 0.029 0.800 0.218
ECAOOHTSEBN0441142020102 01 BD2:12.5 0.24 1.50 8.03 129. 0.
32.20 2.45 2.45 448. 273. 722. 4.27 2.60 6.87
0.514 0.313 0.827 5.149 0.028 0.639 0.174
ECAO TSBBC0641062020101 01 BA2: 5.2 0.04 1.10 3.31 225. 0.
27.00 2.51 2.51 934. 361. 1295. 9.53 3.68 13.21
0.195 0.076 0.271 7.265 0.022 1.230 0.335
ECAO TSBBC0641062020101 01 BD1: 5.1 0.04 1.50 3.24 225. 0.
27.00 2.51 2.51 0. 260. 260. 0.00 2.65 2.65
0.000 0.054 0.054 1.990 0.004 0.247 0.067
ECAO TSBBC0641062020201 01 BA2: 5.2 0.04 1.10 4.65 300. 0.
27.00 2.51 2.51 1245. 828. 2073. 12.49 8.31 20.80
0.262 0.175 0.437 11.442 0.048 1.937 0.528
ECAOOHTSBBC0441041020201 01 BD1: 5.1 0.06 1.50 4.56 630. 0.
27.00 2.51 2.51 2615. 1739. 4354. 25.37 16.88 42.26
0.812 0.540 1.352 31.692 0.096 3.935 1.073
ECAOOHTSCBC0441041020101 01 BA2: 5.2 0.05 1.10 3.31 500. 0.
23.00 2.51 2.51 2075. 1381. 3456. 20.11 13.38 33.49
0.523 0.348 0.871 18.419 0.055 3.119 0.851
ECAOWVTSFBN0641042020102 01 BD1: 5.1 0.31 1.50 3.24 555. 0.
26.60 2.45 2.45 1122. 1532. 2654. 10.36 14.15 24.51
1.621 2.215 3.836 18.385 0.040 2.283 0.623
ECAOWVTSFBN0641042020102 01 BA2: 5.2 0.31 1.10 3.31 555. 0.
26.60 2.45 2.45 808. 0. 808. 7.46 0.00 7.46
1.167 0.000 1.167 4.103 0.012 0.695 0.189
ECAO TSHBN0441041020102 01 BA2: 5.2 0.38 1.10 3.31 600. 0.
26.60 2.45 2.45 2086. 1416. 3502. 19.81 13.45 33.26
3.714 2.522 6.236 18.292 0.055 3.097 0.845
ECAO TSHBN0441042020302 01 BA2: 5.2 0.26 1.10 0.57 180. 0.
32.20 2.45 2.45 626. 497. 1123. 6.25 4.96 11.21
0.818 0.650 1.468 6.165 0.003 1.044 0.285
Unscrubbed Coal 4
ECAO TCOLU0211412050710 01 BD2:12.5 0.40 1.50 12.54 8. 0.
32.00 1.54 1.54 33. 26. 60. 0.35 0.27 0.62
0.069 0.055 0.124 0.465 0.004 0.058 0.016
ECAO TCOLU0231082020110 01 BD2:12.5 0.46 1.50 8.03 28. 0.
32.00 1.54 0.00 75. 0. 75. 0.78 0.00 0.78
0.179 0.000 0.179 0.583 0.003 0.072 0.020
ECAO TCOLU0241082050710 01 BA2: 5.2 0.11 0.28 5.17 204. 0.
11.70 1.54 1.54 847. 563. 1410. 7.62 5.07 12.69
0.419 0.279 0.698 1.745 0.033 1.182 0.322
ECAO TCOLU0411181050710 01 BB2: 4.1 0.52 1.00 4.10 39. 0.
32.00 1.54 1.54 162. 129. 290. 1.68 1.34 3.02
0.433 0.344 0.778 1.510 0.006 0.281 0.077
ECAO TCOLU0411142050710 01 BE2:10.4 0.48 2.20 10.45 111. 0.
32.00 1.54 1.54 461. 366. 827. 4.79 3.81 8.60
1.145 0.909 2.054 9.456 0.045 0.800 0.218
ECAO TCOLU0431041020110 01 BA2: 5.2 0.81 1.10 3.31 123. 0.
32.00 1.54 1.54 149. 261. 410. 1.55 2.71 4.26
0.631 1.103 1.734 2.344 0.007 0.397 0.108
ECAO TCOLU0431041020110 01 BD1: 5.1 0.81 1.50 3.24 123. 0.
32.00 1.54 1.54 179. 0. 179. 1.86 0.00 1.86

0.758 0.000 0.758 1.396 0.003 0.173 0.047
ECAO TCOLU0431142020110 01 BD2:12.5 0.46 1.50 8.03 106. 0.
32.00 1.54 1.54 283. 225. 507. 2.94 2.34 5.28
0.676 0.537 1.214 3.957 0.021 0.491 0.134
ECAO TCOLU0431182020110 01 BB2: 4.1 0.45 1.00 2.62 179. 0.
32.00 1.54 1.54 622. 379. 1002. 6.47 3.94 10.42
1.443 0.880 2.323 5.208 0.014 0.970 0.265
ECAO TCOLU0431192020110 01 BE1: 6.1 0.46 2.20 3.89 155. 0.
32.00 1.54 1.54 539. 328. 867. 5.60 3.42 9.02
1.289 0.786 2.074 9.921 0.018 0.840 0.229
ECAO TCOLU0431042050710 01 BD1: 5.1 0.48 1.50 5.07 72. 0.
32.00 1.54 1.54 250. 153. 403. 2.60 1.59 4.19
0.622 0.379 1.001 3.142 0.011 0.390 0.106
ECAO TCOLU0611062020210 01 BD1: 5.1 0.46 1.50 4.56 40. 0.
32.00 1.54 1.54 166. 132. 298. 1.73 1.37 3.10
0.397 0.315 0.712 2.323 0.007 0.288 0.079
ECAO TCOLU0631051020110 01 BD2:12.5 0.80 1.50 8.03 46. 0.
32.00 1.54 1.54 123. 97. 220. 1.28 1.01 2.29
0.510 0.405 0.916 1.717 0.009 0.213 0.058
ECAO TCOLU0631202020110 01 BB2: 4.1 0.46 1.00 2.62 32. 0.
32.00 1.54 1.54 111. 88. 200. 1.16 0.92 2.08
0.266 0.211 0.477 1.038 0.003 0.193 0.053
ECAOVATCOLU0331062020110 01 BA2: 5.2 0.40 1.10 3.31 90. 0.
32.00 1.54 1.54 313. 191. 504. 3.25 1.98 5.24
0.651 0.397 1.047 2.880 0.009 0.488 0.133
ECAO TOLBU0411181020710 01 BE1: 6.1 0.93 2.20 6.08 14. 0.
26.40 1.54 1.54 58. 46. 104. 0.60 0.48 1.08
0.281 0.223 0.504 1.193 0.003 0.101 0.028
ECAO TOLBU0411182020710 01 BE1: 6.1 0.25 2.20 6.08 12. 0.
32.00 1.54 1.54 50. 40. 89. 0.52 0.41 0.93
0.065 0.052 0.117 1.022 0.003 0.087 0.024
ECAO TOLBU0412181020210 01 BB2: 4.1 0.85 1.00 3.69 39. 0.
32.00 1.54 1.54 162. 129. 290. 2.21 1.75 3.96
0.943 0.749 1.692 1.979 0.007 0.369 0.101
ECAO TOLBU0412181020710 01 BF1: 6.8 0.88 3.00 6.83 20. 0.
32.00 1.54 1.54 83. 66. 149. 1.16 0.92 2.08
0.511 0.406 0.917 3.127 0.007 0.194 0.053
ECAO TOLBU0611191020710 01 BG1: 8.0 0.91 5.00 8.04 10. 0.
32.00 1.54 1.54 42. 33. 74. 0.43 0.34 0.77
0.197 0.156 0.353 1.936 0.003 0.072 0.020
ECAO TOLBU0631191040110 01 BE1: 6.1 0.52 2.20 3.95 26. 0.
26.40 1.54 1.54 90. 55. 145. 0.94 0.57 1.51
0.246 0.150 0.396 1.664 0.003 0.141 0.038
ECAO TOLBU0632052020110 01 BD2:12.5 0.47 1.50 8.03 145. 0.
32.00 1.54 1.54 387. 307. 694. 4.41 3.50 7.91
1.032 0.820 1.852 5.935 0.032 0.737 0.201
ECAO TOLBU0641052020110 01 BD2:12.5 0.38 1.50 8.03 137. 0.
32.00 1.54 1.54 476. 290. 767. 4.93 3.00 7.94
0.939 0.572 1.512 5.951 0.032 0.739 0.202
ECAOMDTOLBU0231082020110 01 BD2:12.5 0.43 1.50 8.03 86. 0.
32.00 1.54 1.54 229. 182. 412. 2.27 1.80 4.07
0.486 0.386 0.872 3.056 0.016 0.379 0.103
ECAO TRRBU0432042020110 01 BA2: 5.2 0.30 1.10 3.31 129. 0.
32.00 1.54 1.54 344. 273. 617. 4.15 3.30 7.45
0.623 0.495 1.118 4.099 0.012 0.694 0.189
ECAO TSBBU0632061020110 01 BA2: 5.2 0.56 1.10 3.31 141. 0.
32.00 1.54 0.00 376. 0. 376. 4.46 0.00 4.46
1.240 0.000 1.240 2.453 0.007 0.415 0.113
ECAO TSBBU0632062020110 01 BA2: 5.2 0.41 1.10 3.31 72. 0.
32.00 1.54 0.00 192. 0. 192. 2.37 0.00 2.37
0.481 0.000 0.481 1.302 0.004 0.220 0.060
ECAO TSBBU0641062020110 01 BA2: 5.2 0.41 1.10 3.31 116. 0.
32.00 1.54 1.54 0. 186. 186. 0.00 1.85 1.85
0.000 0.382 0.382 1.020 0.003 0.173 0.047
ECAO TSBBU0641062020110 01 BD1: 5.1 0.41 1.50 3.24 116. 0.

32.00 1.54 1.54 403. 134. 537. 4.02 1.34 5.35
0.827 0.275 1.102 4.013 0.009 0.498 0.136
ECAOOHTSBBU0431042020110 01 BD1: 5.1 0.37 1.50 3.24 188. 0.
32.00 1.54 1.54 0. 181. 181. 0.00 1.82 1.82
0.000 0.332 0.332 1.362 0.003 0.169 0.046
ECAOOHTSBBU0431042020110 01 BA2: 5.2 0.37 1.10 3.31 188. 0.
32.00 1.54 1.54 654. 217. 871. 6.56 2.18 8.74
1.200 0.399 1.599 4.806 0.014 0.814 0.222
ECAOOHTSBBU0441042020110 01 BD1: 5.1 0.42 1.50 3.24 633. 0.
30.10 1.54 1.54 2627. 1016. 3643. 24.38 9.43 33.81
5.168 1.999 7.167 25.356 0.055 3.148 0.859
ECAOOHTSBBU0441042020110 01 BA2: 5.2 0.42 1.10 3.31 633. 0.
30.10 1.54 1.54 0. 732. 732. 0.00 6.79 6.79
0.000 1.439 1.439 3.734 0.011 0.632 0.172
ECAOINTSCBU0431181020110 01 BB2: 4.1 0.62 1.00 2.62 255. 0.
32.00 1.54 1.54 886. 540. 1427. 9.23 5.63 14.86
2.872 1.750 4.622 7.431 0.019 1.384 0.377
ECAOINTSCBU0432181020110 01 BB2: 4.1 0.55 1.00 2.62 95. 0.
32.00 1.54 1.54 330. 201. 532. 3.55 2.16 5.71
0.978 0.596 1.574 2.856 0.007 0.532 0.145
ECAOINTSCBU0441182020110 01 BB2: 4.1 0.36 1.00 2.62 1292. 0.
26.40 1.54 1.54 4492. 3567. 8059. 45.05 35.78 80.82
8.108 6.440 14.548 40.411 0.106 7.526 2.053
ECAO TSDBU0641062020110 01 BA2: 5.2 0.45 1.10 3.31 260. 0.
32.00 1.54 1.54 1079. 417. 1496. 10.12 3.91 14.03
2.266 0.876 3.142 7.716 0.023 1.306 0.356
ECAO TSDBU0641062020110 01 BD1: 5.1 0.45 1.50 3.24 260. 0.
32.00 1.54 1.54 0. 301. 301. 0.00 2.82 2.82
0.000 0.631 0.631 2.113 0.005 0.262 0.072
ECAOOHTSEBU0441142020110 01 BD2:12.5 0.38 1.50 8.03 652. 0.
32.00 1.54 1.54 2267. 1381. 3648. 22.34 13.62 35.96
4.212 2.567 6.779 26.972 0.144 3.349 0.913
ECAOOHTSEBU0442142020110 01 BD2:12.5 0.38 1.50 8.03 156. 0.
32.00 1.54 1.54 416. 331. 747. 4.43 3.52 7.94
0.834 0.663 1.497 5.957 0.032 0.740 0.202
ECAO TSESU0441172020110 01 SB1: 4.5 0.28 0.65 4.41 957. 0.
26.70 1.54 1.54 3972. 3154. 7126. 39.55 31.41 70.96
5.438 4.319 9.757 22.992 0.157 6.846 1.867
ECAO TSFBU0431142020210 01 BB1: 3.4 0.35 1.00 3.07 252. 0.
32.00 1.54 1.54 672. 534. 1206. 6.87 5.46 12.32
1.219 0.968 2.187 6.162 0.019 1.148 0.313
ECAOWVTSFBU0641042020110 01 BD1: 5.1 0.38 1.50 3.24 552. 0.
32.00 1.54 1.54 2291. 886. 3177. 20.18 7.80 27.98
3.814 1.475 5.289 20.987 0.045 2.606 0.711
ECAOWVTSFBU0641042020110 01 BA2: 5.2 0.38 1.10 3.31 552. 0.
32.00 1.54 1.54 0. 638. 638. 0.00 5.62 5.62
0.000 1.062 1.062 3.091 0.009 0.523 0.143
ECAOOHTSGBU0441141010110 01 BD2:12.5 0.54 1.50 8.03 230. 0.
32.00 1.54 1.54 614. 340. 953. 6.36 3.52 9.88
1.711 0.947 2.658 7.411 0.040 0.920 0.251
ECAO TSHBU0441182020110 01 BB2: 4.1 0.35 1.00 2.62 634. 0.
28.30 1.54 1.54 2204. 1751. 3955. 22.91 18.20 41.11
3.987 3.166 7.153 20.556 0.054 3.828 1.044
ECAO TSHBU0441042020310 01 BA2: 5.2 0.40 1.10 0.57 540. 0.
32.00 1.54 1.54 2110. 1491. 3601. 20.35 14.38 34.73
4.080 2.883 6.963 19.101 0.010 3.234 0.882
ECAO TSHBU0641182020110 01 BB2: 4.1 0.43 1.00 2.62 1003. 0.
27.40 1.54 1.54 3487. 2125. 5612. 35.84 21.84 57.68
7.778 4.740 12.518 28.842 0.076 5.372 1.465
ECAO TSHBU0642181020110 01 BB2: 4.1 0.50 1.00 2.62 105. 0.
32.00 1.54 1.54 365. 222. 587. 4.05 2.47 6.51
1.020 0.621 1.641 3.256 0.009 0.606 0.165
ECAO TSHBU0642182020210 01 BB1: 3.4 0.42 1.00 3.07 108. 0.
32.00 1.54 1.54 375. 229. 604. 4.21 2.57 6.77
0.886 0.540 1.426 3.387 0.010 0.631 0.172

```
  ECAO  TSJBU0441202020410 01                BB2: 4.1 0.40  1.00  0.82   560.   0.
  32.00  1.54  1.54     2324.      1546.      3870.    23.81    15.84    39.65
   4.750    3.160    7.910      19.825       0.016         3.692         1.007
  ECAO  TSKBU0441042020110 01                BA2: 5.2 0.39  1.10  3.31   652.   0.
  28.50  1.54  1.54     1318.      1047.      2364.    12.73    10.11    22.85
   2.470    1.962    4.432      12.566       0.038         2.128         0.580
  ECAO  TSKBU0441042020110 01                BD1: 5.1 0.39  1.50  3.24   652.   0.
  28.50  1.54  1.54      949.       754.      1702.     9.17     7.28    16.45
   1.779    1.413    3.191      12.338       0.027         1.532         0.418
  ECAOINTSKBU0432182020110 01                BB2: 4.1 0.33  1.00  2.62   161.   0.
  32.00  1.54  1.54      560.       341.       901.     6.45     3.93    10.38
   1.071    0.652    1.723       5.190       0.014         0.967         0.264
  ECAOINTSKBU0432182020210 01                BB1: 3.4 0.39  1.00  3.07    56.   0.
  32.00  1.54  1.54      195.       119.       313.     2.24     1.37     3.61
   0.437    0.267    0.704       1.805       0.006         0.336         0.092
  ECAO  TSLBU0231052020110 01                BD2:12.5 0.35  1.50  8.03    98.   0.
  32.00  1.54  1.54      341.       208.       548.     3.53     2.15     5.69
   0.617    0.376    0.993       4.267       0.023         0.530         0.144
  ECAO  TSLBU0232052020110 01                BD2:12.5 0.33  1.50  8.03    98.   0.
  32.00  1.54  1.54      341.       208.       548.     3.65     2.22     5.87
   0.600    0.366    0.966       4.406       0.024         0.547         0.149
  ECAO  TSLBU0241052020110 01                BD2:12.5 0.38  1.50  8.03   137.   0.
  32.00  1.54  1.54      476.       290.       767.     4.95     3.02     7.97
   0.946    0.577    1.522       5.978       0.032         0.742         0.202
  ECAO  TSLBU0411141020710 01                BF3:18.7 0.86  3.00 18.69    66.   0.
  30.70  1.54  1.54      274.       218.       491.     2.85     2.26     5.11
   1.226    0.973    2.199       7.670       0.048         0.476         0.130
  ECAO  TSLBU0411141050710 01                BF3:18.7 0.83  3.00 18.69    20.   0.
  32.00  1.54  1.54       83.        66.       149.     0.86     0.69     1.55
   0.360    0.286    0.647       2.323       0.014         0.144         0.039
  ECAO  TSLBU0412141020710 01                BG2:17.4 0.86  5.00 17.43    12.   0.
  32.00  1.54  1.54       50.        40.        89.     0.64     0.51     1.15
   0.275    0.218    0.493       2.868       0.010         0.107         0.029
  ECAO  TSLBU0632182020110 01                BB2: 4.1 0.44  1.00  2.62    71.   0.
  32.00  1.54  1.54      189.       150.       340.     2.32     1.84     4.17
   0.509    0.404    0.912       2.083       0.005         0.388         0.106
Oil/Gas Steam                    5
Oil/Gas Steam_Nox                6
Nuclear                          7
  ECAO  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   876.   0.
 133.00  0.91  0.91     4165.      3040.      7204.    43.98    32.10    76.08
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   873.   0.
 154.00  0.66  0.66     4176.      3033.      7208.    42.42    30.80    73.22
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    8000000 00                NUC      0.00  0.00  0.00  1017.   0.
 206.80  1.14  1.14     4308.      2371.      6679.    46.18    25.42    71.61
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1238.   0.
 109.60  0.60  0.60     5745.      3764.      9509.    58.96    38.63    97.60
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   875.   0.
 183.00  0.91  0.91     3917.      2490.      6407.    42.50    27.02    69.52
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  ECAO  HYDRO00     000000 00                HYDRO    0.00  0.00  0.00  1109.   0.
  15.00  0.00  0.00     1806.      1169.      2974.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  ECAO  CC   0222   000000 00                GAS      0.03  0.00  0.00  1491.   0.
  14.00  1.03  1.03     1002.       768.      1770.     7.61     5.83    13.44
   0.126    0.096    0.222       0.000       0.000         0.713         0.195
  ECAO  CC   0422   000000 00                GAS      0.02  0.00  0.00  4912.   0.
  13.90  1.03  1.03     3301.      2529.      5831.    24.76    18.97    43.73
   0.248    0.190    0.437       0.000       0.000         2.321         0.633
```

```
IGCC                            10
  ECAO  IGCC 0441142050710 00              BG2:17.4 0.10  0.00  0.87   262.   0.
  31.40  1.00  1.00     1135.       877.      2013.     8.26     6.38    14.64
   0.413    0.319    0.732       0.000       0.006         1.364         0.372
Turbine                         11
  ECAO  CT   0222   000000 00              GAS      0.08  0.00  0.00   892.   0.
   2.80  1.03  1.03      206.       154.       360.     2.25     1.68     3.93
   0.090    0.067    0.157       0.000       0.000         0.209         0.057
  ECAO  CT   0412   000000 00              GAS      0.09  0.00  0.00   165.   0.
   3.50  1.03  1.03       38.        28.        67.     0.41     0.31     0.72
   0.019    0.014    0.032       0.000       0.000         0.038         0.010
  ECAO  CT   0612   000000 00              GAS      0.13  0.00  0.00     6.   0.
  11.20  1.03  1.03        1.         1.         2.     0.01     0.01     0.03
   0.001    0.001    0.002       0.000       0.000         0.001         0.000
  ECAO  CT   0622   000000 00              GAS      0.08  0.00  0.00  4215.   0.
   2.80  1.03  1.03      849.       440.      1289.     9.28     4.81    14.09
   0.376    0.195    0.571       0.000       0.000         0.748         0.204
  ECAOVACT   0322   000000 00              GAS      0.08  0.00  0.00   250.   0.
   2.80  1.03  1.03       58.        43.       101.     0.63     0.47     1.10
   0.025    0.019    0.044       0.000       0.000         0.058         0.016
Biomass                         12
  ECAO  BIOMS00  42 000000 00              B1-: 0.6 0.02  0.08  0.57    84.   0.
  44.80  5.36  5.36      364.       281.       645.     3.36     2.59     5.95
   0.034    0.026    0.060       0.238       0.002         0.000         0.000
Geothermal                      13
Landfill Gas                    14
  ECAO  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    12.   0.
  78.60 10.48 10.48       54.        41.        95.     0.73     0.56     1.29
   0.090    0.069    0.159       0.000       0.000         0.000         0.000
Wind                            15
  ECAO  WIND 00     000000 00              NONE     0.00  0.00 71.00   105.   0.
  26.40  0.00  0.00      164.        92.       256.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  ECAO  OTHER00     000000 00              NONE     0.00  0.00  0.00    90.   0.
 103.60  0.00  0.00      397.       313.       710.     4.36     3.44     7.81
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                    19
  ECAO  WASTE062    000000 00              WASTE    0.42  0.00  0.00    60.   0.
 103.60  0.00  0.00      268.       205.       473.     2.95     2.25     5.20
   0.614    0.468    1.082       0.000       0.000         0.000         0.000
Pump Storage                    20
  ECAO  PUMPS00     000000 00              NONE     0.00  0.00 71.00   245.   0.
   6.50  0.00  0.00       51.       110.       160.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                    21
Cgn_Coal                        22
  ECAO  CGCOU0231412050710 01              BA2: 5.2 0.40  1.10  5.17   127.   0.
  17.40  1.54  1.54      431.       267.       697.     4.29     2.65     6.94
   0.859    0.532    1.391       3.817       0.018         0.646         0.176
  ECAO  CGCOU0411142050710 01              BA2: 5.2 0.48  1.10  5.17     1.   0.
  17.40  1.54  1.54        4.         3.         7.     0.03     0.03     0.06
   0.008    0.006    0.014       0.033       0.000         0.006         0.002
  ECAO  CGCOS0631041050303 01              BE2:10.4 0.55  0.53  0.31    60.   0.
  23.10  2.94  2.94      243.       196.       439.     1.86     1.50     3.37
   0.514    0.415    0.930       0.889       0.001         0.314         0.086
Cgn_Gas                         23
  ECAO  CGCT 0412   000000 00              GAS      0.10  0.00  0.00    17.   0.
   2.80  1.03  1.03        4.         3.         7.     0.04     0.03     0.07
   0.002    0.001    0.003       0.000       0.000         0.003         0.001
  ECAO  CGCT 0422   000000 00              GAS      0.08  0.00  0.00    78.   0.
   2.80  1.03  1.03       18.        13.        31.     0.20     0.15     0.34
   0.008    0.006    0.014       0.000       0.000         0.018         0.005
```

```
  ECAO  CGCT 0612   000000 00              GAS      0.08  0.00  0.00     7.   0.
   2.80  1.03  1.03        2.         1.         3.     0.02     0.01     0.03
   0.001    0.001    0.001       0.000       0.000         0.002         0.000
  ECAO  CGCC 0422   000000 00              GAS      0.02  0.00  0.00   525.   0.
  13.90  1.03  1.03      353.       270.       623.     2.65     2.03     4.67
   0.026    0.020    0.047       0.000       0.000         0.248         0.068
Cgn_Oil                        24
Cgn_Other                      25
  ECAO  CGBIO00  42 000000 00              B1-: 0.6 0.02  0.08  0.57     6.   0.
  44.80  5.36  5.36       26.        20.        46.     0.22     0.17     0.39
   0.002    0.002    0.004       0.016       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
  ECAOINTSBBU0441182020110 01     ML01     BF1: 6.8 0.45  0.12  2.32   370.  38.
  41.17  2.54  2.54     1536.      1220.      2756.    15.43    12.25    27.68
   3.487    2.769    6.256       1.661       0.032         2.578         0.703
Ret.ExistSCR & Scrub           38
  ECAO  TSDBC0641061020101 01     LO01     BF2:11.1 0.06  0.15  1.11    84.  19.
  34.48  3.85  3.85      348.       277.       625.     3.29     2.61     5.89
   0.103    0.082    0.186       0.442       0.003         0.549         0.150
  ECAOOHTSDBC0441041020101 01     ML02     BF2:11.1 0.05  0.12  1.11  1062.  21.
  41.50  3.42  3.42     4408.      3501.      7910.    39.91    31.70    71.61
   1.038    0.824    1.862       4.297       0.040         6.669         1.819
  ECAOOHTSDBC0441042020101 01     ML02     BF2:11.1 0.04  0.12  1.11   490.  24.
  36.28  3.50  3.50     2032.      1613.      3645.    20.52    16.30    36.82
   0.421    0.334    0.755       2.209       0.020         3.429         0.935
  ECAO  TSEBC0641042020101 01     LO02     BG1: 8.0 0.05  0.25  0.80  4112.  21.
  33.05  3.84  3.84    17065.      8566.     25631.   159.35    79.99   239.34
   3.904    1.960    5.864      29.918       0.096        22.288         6.079
  ECAO  TSEBC0641042020101 01     LO02     BG2:17.4 0.05  0.25  1.74  4112.  21.
  33.05  3.84  3.84        0.      4987.      4987.     0.00    46.57    46.57
   0.000    1.141    1.141       5.821       0.041         4.337         1.183
  ECAO  TSLBC0441181020101 01     LO01     BG1: 8.0 0.05  0.25  0.80  1234.  21.
  35.28  3.89  3.89     5119.      4066.      9185.    50.72    40.28    91.00
   1.344    1.067    2.411      11.375       0.037         8.474         2.311
  ECAO  TSLBC0441182020101 01     LO01     BG1: 8.0 0.05  0.25  0.80   617.  22.
  31.19  3.91  3.91     2560.      2033.      4593.    25.79    20.48    46.28
   0.580    0.461    1.041       5.784       0.019         4.309         1.175
  ECAO  TSGSC0441201020101 01     ML01     BF1: 6.8 0.09  0.12  0.68  1001.  28.
  44.50  3.46  3.46     2892.         0.      2892.    27.54     0.00    27.54
   1.212    0.000    1.212       1.652       0.009         2.565         0.699
  ECAO  TSGSC0441201020101 01     ML01     BE1: 6.1 0.09  0.09  0.61  1001.  28.
  44.50  3.46  3.46     1261.      3298.      4559.    12.01    31.41    43.42
   0.528    1.382    1.910       1.910       0.013         4.043         1.103
  ECAOOHTSIBC0441041020101 01     ML01     BF2:11.1 0.06  0.12  1.11   993.  28.
  44.70  3.46  3.46     4120.      3272.      7392.    39.00    30.97    69.97
   1.228    0.976    2.204       4.198       0.039         6.516         1.777
  ECAO  TSXBC0641202020201 01     LO01     BG1: 8.0 0.04  0.25  0.80   490.  24.
  26.79  3.91  3.91     2032.      1613.      3645.    20.49    16.28    36.77
   0.420    0.334    0.754       4.596       0.015         3.424         0.934
Ret.ExistSNCR & Scrub          39
  ECAO  TSBBN0241041020102 01     ML02     BF2:11.1 0.35  0.12  3.77   181.  23.
  35.87  3.42  3.42      749.       595.      1344.     7.32     5.81    13.13
   1.280    1.017    2.297       0.788       0.025         1.222         0.333
  ECAOOHTSGBN0441142020102 01     LO01     BG1: 8.0 0.19  0.25  2.73   584.  21.
```

34.87 3.76 3.76 2426. 1926. 4352. 22.16 17.60 39.76
2.161 1.716 3.877 4.970 0.054 3.703 1.010
ECAO TSHBN0441042020102 01 LO01 BG1: 8.0 0.28 0.25 2.73 587. 22.
34.97 3.80 3.80 2438. 1936. 4374. 23.41 18.59 41.99
3.253 2.584 5.837 5.249 0.057 3.911 1.067
Ret.SCR 40
ECAO TSABU0441201020110 01 SCR2 BB2: 4.1 0.08 1.00 2.62 480. 11.
32.60 2.57 2.57 1992. 1582. 3574. 18.78 14.92 33.69
0.723 0.574 1.297 16.847 0.044 3.138 0.856
ECAOOHTSBBU0441041020110 01 SCR2 BD1: 5.1 0.06 1.50 3.24 134. 12.
32.70 2.60 2.60 0. 215. 215. 0.00 2.03 2.03
0.000 0.066 0.066 1.526 0.003 0.189 0.052
ECAOOHTSBBU0441041020110 01 SCR2 BA2: 5.2 0.06 1.10 3.31 134. 12.
32.70 2.60 2.60 556. 155. 711. 5.26 1.46 6.72
0.171 0.048 0.219 3.699 0.011 0.626 0.171
ECAOOHTSCBU0441041020210 01 SCR2 BA2: 5.2 0.05 1.10 4.65 600. 7.
17.80 2.41 2.41 2490. 1657. 4147. 23.25 15.47 38.72
0.593 0.394 0.987 21.295 0.090 3.606 0.983
ECAOVATSDBU0341061020110 01 SCR2 BA2: 5.2 0.07 1.10 3.31 925. 10.
32.50 2.52 2.52 3839. 3049. 6888. 34.71 27.57 62.28
1.284 1.020 2.304 34.254 0.103 5.800 1.582
ECAOWVTSDBU0641051010110 01 SCR2 BD2:12.5 0.06 1.50 8.03 156. 10.
32.60 2.54 2.54 649. 432. 1081. 6.12 4.07 10.18
0.193 0.128 0.321 7.639 0.041 0.948 0.259
ECAO TSESU0441171010110 01 SCR2 SB1: 4.5 0.07 1.00 4.41 431. 8.
26.80 2.45 2.45 1789. 1190. 2979. 17.59 11.70 29.29
0.580 0.386 0.967 14.647 0.065 2.826 0.771
ECAOINTSFBU0441201010110 01 SCR2 BB2: 4.1 0.09 1.00 2.62 500. 7.
32.40 2.43 2.43 2075. 1648. 3723. 17.79 14.13 31.91
0.765 0.607 1.372 15.956 0.042 2.972 0.810
ECAOKYTSFBU0641201020210 01 SCR2 BB2: 4.1 0.05 1.00 3.69 983. 7.
17.80 2.43 2.43 4080. 2714. 6794. 41.71 27.75 69.47
1.105 0.735 1.841 34.733 0.128 6.469 1.764
ECAOKYTSFBU0641202020210 01 SCR1 BB2: 4.1 0.05 1.00 3.69 509. 7.
26.80 2.43 2.43 2112. 1405. 3518. 21.37 14.22 35.58
0.534 0.355 0.890 17.791 0.066 3.314 0.904
ECAOWVTSFBU0641041020110 01 SCR2 BD1: 5.1 0.05 1.50 3.24 1600. 6.
26.70 2.39 2.39 2501. 2021. 4522. 23.18 18.73 41.91
0.603 0.487 1.090 31.432 0.068 3.903 1.064
ECAOWVTSFBU0641041020110 01 SCR2 BA2: 5.2 0.05 1.10 3.31 1600. 6.
26.70 2.39 2.39 4139. 2579. 6718. 38.35 23.90 62.26
0.997 0.621 1.619 34.241 0.103 5.797 1.581
ECAO TSHBU0641041020110 01 SCR2 BA2: 5.2 0.07 1.10 3.31 680. 11.
32.60 2.56 2.56 2822. 1878. 4700. 26.27 17.48 43.75
0.946 0.629 1.575 24.065 0.072 4.074 1.111
ECAO TSISU0441171010110 01 SCR2 SB1: 4.5 0.06 1.00 4.41 469. 8.
26.80 2.44 2.44 1946. 1295. 3241. 19.22 12.79 32.01
0.567 0.377 0.944 16.006 0.071 3.088 0.842
ECAO TSXBU0641041020110 01 SCR2 BA2: 5.2 0.07 0.66 3.31 290. 12.
32.60 2.59 2.59 1204. 956. 2159. 11.40 9.05 20.45
0.410 0.326 0.736 6.750 0.034 1.905 0.519
Ret.ExistScrub & SCR 41
ECAO TSVBS0641201020103 01 SCR2 BG1: 8.0 0.06 0.25 0.80 633. 9.
43.20 3.88 3.88 2627. 2086. 4714. 26.75 21.25 48.00
0.843 0.669 1.512 6.000 0.019 4.470 1.219
ECAOINTSVBS0441181010103 01 SCR2 BG1: 8.0 0.07 0.35 0.80 480. 10.
43.30 3.92 3.92 1992. 1582. 3574. 19.11 15.17 34.28
0.716 0.569 1.286 6.085 0.014 3.192 0.871
ECAOINTSVBS0441182020103 01 SCR1 BG1: 8.0 0.05 0.79 0.80 1664. 8.
42.50 3.85 3.85 6906. 5485. 12391. 71.46 56.76 128.22
1.787 1.419 3.205 50.647 0.052 11.940 3.256
ECAO TSXBS0241042020103 01 SCR1 BF2:11.1 0.05 0.24 1.11 1080. 7.
41.60 3.82 3.82 4482. 3560. 8042. 42.47 33.73 76.20
1.062 0.843 1.905 9.144 0.042 7.096 1.935
ECAO TSXBS0241042020703 01 SCR1 BF2:11.1 0.05 0.24 1.11 1566. 6.

```
  43.10  3.79  3.79        0.      3817.      3817.     0.00    37.56    37.56
   0.000    0.939    0.939       4.563       0.021         3.497         0.954
  ECAO  TSXBS0241042020703 01     SCR1     BE2:10.4 0.05  0.18  1.04  1566.   6.
  43.10  3.79  3.79     6499.      1344.      7844.    63.94    13.23    77.17
   1.598    0.331    1.929       6.875       0.040         7.186         1.960
  ECAO  TSXBS0242412020703 01     SCR1     BE3:18.4 0.05  0.18  1.84   134.  12.
  43.70  4.00  4.00      556.       442.       998.     6.32     5.02    11.34
   0.158    0.126    0.284       0.998       0.010         1.056         0.288
  ECAO  TSXBS0641201020103 01     SCR2     BG1: 8.0 0.07  0.56  0.80   469.  10.
  43.30  3.92  3.92     1946.      1546.      3492.    20.39    16.19    36.58
   0.683    0.542    1.225      10.334       0.015         3.406         0.929
  ECAO  TSXBS0641042020103 01     SCR1     BE2:10.4 0.05  0.26  1.04  1228.   7.
  41.00  3.81  3.81     5096.      4048.      9144.    49.80    39.55    89.36
   1.245    0.989    2.234      11.795       0.047         8.321         2.269
  ECAO  TSXBS0641202020103 01     SCR1     BG1: 8.0 0.05  0.55  0.80   993.   9.
  42.30  3.91  3.91     4121.      3273.      7394.    42.35    33.63    75.98
   1.059    0.841    1.900      20.895       0.031         7.076         1.930
  ECAO  TSXBS0642201020103 01     SCR2     BG1: 8.0 0.06  0.50  0.80   155.  11.
  43.60  3.98  3.98      643.       511.      1154.     7.14     5.67    12.80
   0.218    0.173    0.390       3.201       0.005         1.192         0.325
  ECAO  TSYBS0441192020103 01     SCR1     BG1: 8.0 0.05  0.70  0.80  1722.   8.
  36.00  3.85  3.85        0.       539.       539.     0.00     5.28     5.28
   0.000    0.132    0.132       1.846       0.002         0.491         0.134
  ECAO  TSYBS0441192020103 01     SCR1     BF1: 6.8 0.05  0.42  0.68  1722.   8.
  36.00  3.85  3.85     7147.      5137.     12283.    69.89    50.23   120.12
   1.747    1.256    3.003      25.225       0.041        11.186         3.051
  ECAOOHTSYBS0441042020103 01     SCR1     BG1: 8.0 0.05  0.45  0.80  1300.   6.
  23.40  3.78  3.78        0.      4285.      4285.     0.00    40.80    40.80
   0.000    1.020    1.020       9.078       0.016         3.800         1.036
  ECAOOHTSYBS0441042020103 01     SCR1     BG2:17.4 0.05  0.45  1.74  1300.   6.
  23.40  3.78  3.78     5395.         0.      5395.    51.37     0.00    51.37
   1.284    0.000    1.284      11.431       0.045         4.784         1.305
  ECAOOHTSBBS0441041020304 01     SCR2     BD2:12.5 0.06  0.15  0.63   132.  12.
  43.70  4.00  4.00      548.       435.       983.     5.07     4.03     9.10
   0.165    0.131    0.296       0.682       0.003         0.847         0.231
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  ECAOOHTOLBU0441142020110 01     RO01     BG2:17.4 0.05  0.25  1.74   238.  46.
  44.89  3.90  3.90      987.       784.      1771.     9.75     7.75    17.50
   0.244    0.194    0.438       2.188       0.015         1.630         0.445
  ECAOOHTSABU0441051010110 01     SO01     BG1: 8.0 0.06  0.25  0.80   401.  50.
  45.89  3.90  3.90     1666.      1323.      2989.    15.97    12.68    28.65
   0.495    0.393    0.888       3.581       0.012         2.668         0.728
  ECAOOHTSABU0441051020110 01     SO01     BG1: 8.0 0.06  0.25  0.80   372.  52.
  46.29  3.91  3.91     1544.      1226.      2770.    14.86    11.80    26.66
   0.468    0.372    0.840       3.332       0.011         2.482         0.677
  ECAO  TSBBU0241042020110 01     RO01     BG1: 8.0 0.05  0.25  0.80   550.  30.
  35.37  3.82  3.82     2283.      1814.      4097.    22.93    18.21    41.14
   0.573    0.455    1.029       5.143       0.017         3.831         1.045
  ECAOWVTSDBU0641051010110 01     SL01     BF2:11.1 0.06  0.12  1.11   611.  40.
  44.79  3.50  3.50     2538.      2015.      4553.    24.41    19.39    43.80
   0.769    0.611    1.380       2.628       0.024         4.078         1.112
  ECAO  TSFBU0441142020110 01     RO01     BG2:17.4 0.05  0.25  1.74   583.  28.
  35.07  3.73  3.73     2422.      1923.      4345.    22.47    17.85    40.32
   0.562    0.446    1.008       5.039       0.035         3.754         1.024
  ECAO  TSFSU0441202020110 01     RO02     BG1: 8.0 0.05  0.25  0.80  2545.  26.
  21.61  3.77  3.77    10564.      8390.     18954.   105.62    83.88   189.50
   2.640    2.097    4.738      23.688       0.076        17.647         4.813
  ECAOOHTSGBU0441142020110 01     RL02     BF3:18.7 0.05  0.12  1.87   925.  32.
  37.29  3.41  3.41        0.       738.       738.     0.00     7.22     7.22
   0.000    0.181    0.181       0.433       0.007         0.672         0.183
  ECAOOHTSGBU0441142020110 01     RL02     BF2:11.1 0.05  0.12  1.11   925.  32.
  37.29  3.41  3.41     3840.      2312.      6151.    37.57    22.62    60.19
   0.939    0.566    1.505       3.612       0.033         5.605         1.529
```

```
  ECAO  TSGSU0441201020210 01     SL01     BF1: 6.8 0.09  0.12  0.68   191.  40.
  44.89  3.51  3.51      792.       629.      1422.     7.70     6.12    13.81
   0.362    0.287    0.649       0.829       0.005         1.286         0.351
  ECAO  TSHBU0441041020110 01     SO01     BG1: 8.0 0.05  0.25  0.80   573.  29.
  35.17  3.76  3.76     2377.      1888.      4265.    22.54    17.90    40.45
   0.609    0.483    1.092       5.056       0.016         3.766         1.027
  ECAO  TSHBU0641042020110 01     RL02     BF2:11.1 0.05  0.12  1.11   431.  32.
  42.09  3.36  3.36     1788.      1420.      3208.    16.29    12.94    29.22
   0.407    0.323    0.731       1.753       0.016         2.721         0.742
  ECAO  TSBBU0241041020110 01     SCR2ML02 BF2:11.1 0.06  0.12  1.11   979.  30.
  35.97  3.37  3.37     4063.      3227.      7290.    38.13    30.28    68.41
   1.087    0.863    1.950       4.105       0.038         6.371         1.737
  ECAO  TSHBU0441042020110 01     ML02SCR1 BF2:11.1 0.05  0.12  1.11  2252.  32.
  37.70  3.39  3.39     9345.      7422.     16767.    89.26    70.90   160.16
   2.232    1.772    4.004       9.610       0.089        14.914         4.068
  ECAO  TSJBU0441051020110 01     SCR2LO01 BG1: 8.0 0.06  0.25  0.80   563.  29.
  35.27  3.74  3.74     2336.      1856.      4192.    21.64    17.19    38.83
   0.682    0.541    1.223       4.854       0.016         3.616         0.986
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-----------------------------------------------------------------------------
Year: 2010, Region: ERCT     (Emissions By Plant)
--------------------------------------------------
```

NOx	SO2	MER	CO2	Carbon
	Generation		Trillion	

```
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  ERCTTXTSXLS2342302020103 02              LF2: 9.8 0.30  0.77  5.48  4341.   0.
  41.00  2.94  2.94    11077.     13686.     24763.   123.25   152.29   275.53
  18.734   23.147   41.881     106.673       0.755        26.921         7.342
  ERCTTXTSXLS2342302030303 02              LF2: 9.8 0.15  0.60  4.21   300.   0.
  23.10  2.94  2.94     1245.       989.      2234.    13.39    10.63    24.02
   0.984    0.781    1.765       7.209       0.051         2.347         0.640
  ERCTTXTSXSS2341292020303 01              SD2: 6.7 0.30  0.11  1.81   530.   0.
  23.10  2.94  2.94     2200.      1747.      3947.    20.97    16.65    37.62
   3.145    2.498    5.643       2.133       0.034         3.629         0.990
  ERCTTXTSXSS3541292020103 01              SD2: 6.7 0.46  0.12  5.63   676.   0.
  35.60  2.94  2.94     2805.      2228.      5034.    27.32    21.70    49.01
   6.242    4.958   11.199       3.019       0.138         4.729         1.290
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  ERCTTXTSABU2341292020210 01              BB1: 3.4 0.30  0.73  3.07   632.   0.
  22.40  1.54  1.54     2623.      2083.      4706.    25.01    19.86    44.87
   3.751    2.979    6.730      16.489       0.069         4.178         1.140
  ERCTTXTSBSU2341292020110 01              SB2: 6.5 0.32  0.69  6.29  1160.   0.
  22.40  1.54  1.54     4814.      3824.      8638.    46.94    37.28    84.22
   7.440    5.909   13.348      29.139       0.265         8.125         2.216
Oil/Gas Steam                  5
  ERCTTXSTGAU2011   000000 00              GAS      0.26  0.00  0.00    96.   0.
  21.40  0.00  2.57        0.       101.       101.     0.00     1.07     1.07
   0.000    0.142    0.142       0.000       0.000         0.057         0.016
  ERCTTXSTGAU2211   000000 00              GAS      0.26  0.00  0.00    12.   0.
  21.40  0.00  2.57        0.        13.        13.     0.00     0.13     0.13
   0.000    0.018    0.018       0.000       0.000         0.007         0.002
  ERCTTXSTGAU2221   000000 00              GAS      0.26  0.00  0.00    30.   0.
  21.40  0.00  2.57        0.        32.        32.     0.00     0.34     0.34
   0.000    0.044    0.044       0.000       0.000         0.018         0.005
  ERCTTXSTGAU2511   000000 00              GAS      0.26  0.00  0.00   144.   0.
  21.40  0.00  2.57        0.       152.       152.     0.00     1.61     1.61
   0.000    0.212    0.212       0.000       0.000         0.085         0.023
  ERCTTXSTGAU2521   000000 00              GAS      0.26  0.00  0.00   205.   0.
  21.40  0.00  2.57        0.       216.       216.     0.00     2.29     2.29
   0.000    0.302    0.302       0.000       0.000         0.122         0.033
  ERCTTXSTGAU2711   000000 00              GAS      0.26  0.00  0.00    11.   0.
  10.70  0.00  2.57        0.        12.        12.     0.00     0.12     0.12
   0.000    0.016    0.016       0.000       0.000         0.007         0.002
  ERCTTXSTHSU2021   000000 00              GAS      0.19  0.00  0.00  1078.   0.
  20.60  0.00  2.57        0.       941.       941.     0.00     9.36     9.36
   0.000    0.908    0.908       0.000       0.000         0.497         0.136
  ERCTTXSTHSU2221   000000 00              GAS      0.27  0.00  0.00  3693.   0.
  20.00  0.00  2.57        0.      6651.      6651.     0.00    65.10    65.10
   0.000    8.854    8.854       0.000       0.000         3.455         0.942
  ERCTTXSTHSU2321   000000 00              GAS      0.14  0.00  0.00   356.   0.
  19.70  2.57  2.57      445.       657.      1102.     4.40     6.51    10.91
   0.308    0.455    0.764       0.000       0.000         0.579         0.158
  ERCTTXSTHSU2521   000000 00              GAS      0.48  0.00  0.00  2276.   0.
  20.40  2.57  2.57     2256.      4200.      6456.    22.11    41.18    63.29
   5.329    9.924   15.253       0.000       0.000         3.359         0.916
  ERCTTXSTLSU2021   000000 00              GAS      0.27  0.00  0.00   285.   0.
  20.70  0.00  2.57        0.       225.       225.     0.00     2.31     2.31
   0.000    0.315    0.315       0.000       0.000         0.123         0.033
  ERCTTXSTLSU2221   000000 00              GAS      0.22  0.00  0.00  4296.   0.
  20.60  0.00  2.57        0.      4529.      4529.     0.00    45.85    45.85
```

```
  0.000    5.043    5.043       0.000       0.000         2.433         0.664
  ERCTTXSTLSU2321   000000 00              GAS      0.12  0.00  0.00   405.   0.
  19.70  0.00  2.57        0.       747.       747.     0.00     7.47     7.47
  0.000    0.448    0.448       0.000       0.000         0.397         0.108
  ERCTTXSTLSU2322   000000 00              GAS      0.15  0.00  0.00   146.   0.
  19.70  0.00  2.57        0.       154.       154.     0.00     1.70     1.70
  0.000    0.130    0.130       0.000       0.000         0.090         0.025
  ERCTTXSTLSU2422   000000 00              GAS      0.28  0.00  0.00    87.   0.
  21.40  0.00  2.57        0.        92.        92.     0.00     1.01     1.01
  0.000    0.141    0.141       0.000       0.000         0.054         0.015
  ERCTTXSTLSU2511   000000 00              GAS      0.54  0.00  0.00    11.   0.
  21.40  0.00  2.57        0.        12.        12.     0.00     0.12     0.12
  0.000    0.033    0.033       0.000       0.000         0.007         0.002
  ERCTTXSTLSU2512   000000 00              GAS      0.50  0.00  0.00    75.   0.
  21.40  0.00  2.57        0.        79.        79.     0.00     0.91     0.91
  0.000    0.229    0.229       0.000       0.000         0.048         0.013
  ERCTTXSTLSU2521   000000 00              GAS      0.29  0.00  0.00   726.   0.
  20.20  0.00  2.57        0.       765.       765.     0.00     7.99     7.99
  0.000    1.167    1.167       0.000       0.000         0.424         0.116
  ERCTTXSTLSU2522   000000 00              GAS      0.28  0.00  0.00   386.   0.
  21.10  0.00  2.57        0.       305.       305.     0.00     3.51     3.51
  0.000    0.494    0.494       0.000       0.000         0.187         0.051
  ERCTTXSTLSU3521   000000 00              GAS      0.11  0.00  0.00   204.   0.
  19.70  2.57  2.57      271.       376.       647.     2.78     3.86     6.64
  0.153    0.212    0.365       0.000       0.000         0.352         0.096
  ERCTTXSTLSU3522   000000 00              GAS      0.12  0.00  0.00   111.   0.
  19.70  0.00  2.57        0.       117.       117.     0.00     1.30     1.30
  0.000    0.078    0.078       0.000       0.000         0.069         0.019
Oil/Gas Steam_Nox                 6
  ERCTTXSTHSC1821   000000 00              GAS      0.03  0.00  0.00   739.   0.
  20.90  0.00  2.67        0.       112.       112.     0.00     1.10     1.10
  0.000    0.018    0.018       0.000       0.000         0.058         0.016
  ERCTTXSTHSO2521   000000 00              GAS      0.16  0.00  0.00   116.   0.
  20.00  3.02  3.02      154.       214.       368.     1.49     2.07     3.56
  0.119    0.166    0.285       0.000       0.000         0.189         0.052
  ERCTTXSTHSO3521   000000 00              GAS      0.15  0.00  0.00   200.   0.
  20.00  3.02  3.02      266.       369.       635.     2.58     3.59     6.17
  0.194    0.269    0.463       0.000       0.000         0.328         0.089
  ERCTTXSTLSO2021   000000 00              GAS      0.14  0.00  0.00   940.   0.
  21.60  0.00  3.02        0.       991.       991.     0.00     9.93     9.93
  0.000    0.675    0.675       0.000       0.000         0.527         0.144
Nuclear                           7
  ERCT  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1196.   0.
  81.80  0.52  0.52     5713.      4027.      9741.    60.68    42.77   103.46
  0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCT  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1329.   0.
  92.40  0.48  0.48     5786.      4875.     10661.    58.71    49.47   108.19
  0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCT  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1241.   0.
  81.80  0.52  0.52     5479.      4265.      9745.    57.92    45.09   103.01
  0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCT  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1314.   0.
  92.40  0.48  0.48     5755.      4603.     10358.    60.38    48.30   108.68
  0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                             8
  ERCT  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   356.   0.
  15.50  0.00  0.00      431.       365.       796.     0.00     0.00     0.00
  0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                    9
  ERCTTXCC   1922   000000 00              GAS      0.02  0.00  0.00  1108.   0.
  13.90  1.03  1.03     2234.      2857.      5091.    16.76    21.43    38.18
  0.168    0.214    0.382       0.000       0.000         2.026         0.553
  ERCTTXCC   1923   000000 00              GAS      0.16  0.00  0.00   463.   0.
  19.90  0.00  1.03        0.        79.        79.     0.00     0.82     0.82
  0.000    0.065    0.065       0.000       0.000         0.044         0.012
```

```
  ERCTTXCC   2313   000000 00                GAS      0.13  0.00  0.00     7.   0.
  14.90  1.03  1.03        2.         4.         5.     0.02     0.04     0.06
   0.001    0.003    0.004       0.000       0.000         0.003         0.001
  ERCTTXCC   2322   000000 00                GAS      0.02  0.00  0.00  4495.   0.
  13.90  1.03  1.03    15109.     11590.     26699.   113.32    86.92   200.24
   1.133    0.869    2.002       0.000       0.000        10.627         2.898
  ERCTTXCC   2513   000000 00                GAS      0.16  0.00  0.00    22.   0.
  19.90  1.03  1.03       15.        34.        49.     0.14     0.32     0.46
   0.011    0.026    0.037       0.000       0.000         0.025         0.007
  ERCTTXCC   2514   000000 00                GAS      0.16  0.00  0.00     3.   0.
  19.90  1.03  1.03        1.         2.         2.     0.01     0.02     0.03
   0.001    0.001    0.002       0.000       0.000         0.001         0.000
  ERCTTXCC   2523   000000 00                GAS      0.14  0.00  0.00   103.   0.
  19.90  1.03  1.03       69.       159.       229.     0.66     1.52     2.17
   0.045    0.105    0.150       0.000       0.000         0.115         0.031
  ERCTTXCC   2524   000000 00                GAS      0.10  0.00  0.00    36.   0.
  19.90  1.03  1.03        8.        19.        27.     0.10     0.22     0.32
   0.005    0.011    0.016       0.000       0.000         0.017         0.005
  ERCTTXCC   2722   000000 00                GAS      0.02  0.00  0.00  8847.   0.
  13.90  1.03  1.03    38351.     29523.     67874.   287.63   221.42   509.06
   2.876    2.214    5.091       0.000       0.000        27.016         7.368
  ERCTTXCC   3522   000000 00                GAS      0.02  0.00  0.00  2623.   0.
  13.90  1.03  1.03    11756.      9017.     20773.    88.17    67.63   155.80
   0.882    0.676    1.558       0.000       0.000         8.268         2.255
  ERCTTXCC   3523   000000 00                GAS      0.13  0.00  0.00   258.   0.
  13.90  1.03  1.03       58.       133.       191.     0.64     1.47     2.12
   0.042    0.097    0.139       0.000       0.000         0.112         0.031
IGCC                            10
Turbine                         11
  ERCTTXCT   1922   000000 00                GAS      0.08  0.00  0.00   980.   0.
   2.80  1.03  1.03      226.       169.       395.     2.48     1.84     4.32
   0.099    0.074    0.173       0.000       0.000         0.229         0.063
  ERCTTXCT   1923   000000 00                GAS      0.10  0.00  0.00   348.   0.
  11.20  0.00  1.03        0.        60.        60.     0.00     0.80     0.80
   0.000    0.041    0.041       0.000       0.000         0.043         0.012
  ERCTTXCT   2114   000000 00                GAS      0.10  0.00  0.00     5.   0.
   2.80  1.03  1.03        1.         1.         2.     0.02     0.01     0.03
   0.001    0.001    0.001       0.000       0.000         0.002         0.000
  ERCTTXCT   2122   000000 00                GAS      0.08  0.00  0.00    85.   0.
   2.80  1.03  1.03       20.        44.        64.     0.21     0.48     0.70
   0.009    0.019    0.028       0.000       0.000         0.037         0.010
  ERCTTXCT   2214   000000 00                GAS      0.10  0.00  0.00    56.   0.
  11.20  1.03  1.03       13.        10.        23.     0.18     0.14     0.32
   0.009    0.007    0.016       0.000       0.000         0.017         0.005
  ERCTTXCT   2312   000000 00                GAS      0.10  0.00  0.00     7.   0.
   2.80  1.03  1.03        5.        11.        16.     0.05     0.11     0.16
   0.003    0.006    0.008       0.000       0.000         0.009         0.002
  ERCTTXCT   2313   000000 00                GAS      0.10  0.00  0.00    21.   0.
  11.20  1.03  1.03        5.         4.         8.     0.07     0.05     0.11
   0.003    0.002    0.006       0.000       0.000         0.006         0.002
  ERCTTXCT   2314   000000 00                GAS      0.10  0.00  0.00     4.   0.
  11.20  1.03  1.03        1.         1.         2.     0.01     0.01     0.02
   0.001    0.001    0.001       0.000       0.000         0.001         0.000
  ERCTTXCT   2322   000000 00                GAS      0.09  0.00  0.00   460.   0.
   2.80  1.03  1.03      106.       238.       344.     1.20     2.69     3.90
   0.055    0.124    0.179       0.000       0.000         0.207         0.056
  ERCTTXCT   2323   000000 00                GAS      0.10  0.00  0.00   200.   0.
   2.80  1.03  1.03       46.        34.        81.     0.59     0.44     1.03
   0.030    0.022    0.052       0.000       0.000         0.055         0.015
  ERCTTXCT   2414   000000 00                GAS      0.10  0.00  0.00     7.   0.
  11.20  1.03  1.03        2.         1.         3.     0.02     0.02     0.04
   0.001    0.001    0.002       0.000       0.000         0.002         0.001
  ERCTTXCT   2512   000000 00                GAS      0.10  0.00  0.00     8.   0.
   8.80  1.03  1.03        6.        12.        18.     0.06     0.13     0.19
   0.003    0.007    0.010       0.000       0.000         0.010         0.003
```

```
  ERCTTXCT   2514   000000 00                GAS      0.10  0.00  0.00    27.   0.
  11.20  1.03  1.03        6.          5.         11.     0.09     0.07     0.16
   0.004    0.003    0.008       0.000       0.000         0.008         0.002
  ERCTTXCT   2722   000000 00                GAS      0.08  0.00  0.00   275.   0.
   2.80  1.03  1.03       64.        142.        206.     0.69     1.56     2.25
   0.028    0.062    0.090       0.000       0.000         0.119         0.033
  ERCTTXCT   3514   000000 00                GAS      0.10  0.00  0.00     1.   0.
   2.80  1.03  1.03        0.          0.          0.     0.00     0.00     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCTTXCT   3522   000000 00                GAS      0.10  0.00  0.00   260.   0.
   2.80  1.03  1.03       60.        135.        195.     0.69     1.55     2.24
   0.035    0.079    0.114       0.000       0.000         0.119         0.032
  ERCTTXCT   3523   000000 00                GAS      0.10  0.00  0.00   502.   0.
   3.10  1.03  1.03      116.        212.        328.     1.43     2.60     4.03
   0.073    0.133    0.206       0.000       0.000         0.214         0.058
  ERCTTXCT   3524   000000 00                GAS      0.10  0.00  0.00   293.   0.
   3.30  1.03  1.03       68.         50.        118.     0.97     0.72     1.69
   0.049    0.037    0.086       0.000       0.000         0.090         0.025
Biomass                        12
Geothermal                     13
Landfill Gas                   14
  ERCT  LFGAS00     000000 00                WASTE    0.25  0.00  0.00    67.   0.
  78.60 10.48 10.48      300.        229.        528.     4.09     3.12     7.21
   0.503    0.384    0.887       0.000       0.000         0.000         0.000
  ERCTTXLG   19    (a)                      WASTE    0.25  0.00  0.00    31. 174.
  78.60 10.48 10.48      132.         95.        227.     1.32     0.95     2.27
   0.162    0.117    0.279       0.000       0.000         0.000         0.000
Wind                           15
  ERCT  WIND 00     000000 00                NONE     0.00  0.00 71.00   703.   0.
  26.40  0.00  0.00     1465.        823.       2288.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCTTXWIN410     (a)                       NONE     0.00  0.00 71.00   224. 138.
  26.40  0.00  0.00      387.        199.        586.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
  ERCT  SOLAR00     000000 00                NONE     0.00  0.00 71.00     1.   0.
  47.00  0.00  0.00        0.          0.          0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other               18
  ERCT  OTHER00     000000 00                NONE     0.00  0.00  0.00    10.   0.
 103.60  0.00  0.00       44.         35.         79.     0.48     0.38     0.87
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                   19
  ERCTTXWASTE271    000000 00                WASTE    0.42  0.00  0.00     2.   0.
 103.60  0.00  0.00        9.          7.         16.     0.10     0.08     0.17
   0.020    0.016    0.036       0.000       0.000         0.000         0.000
Pump Storage                   20
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
  ERCTTXCGCT 1912   000000 00                GAS      0.10  0.00  0.00    17.   0.
   2.80  1.03  1.03        4.          3.          7.     0.04     0.03     0.07
   0.002    0.001    0.003       0.000       0.000         0.003         0.001
  ERCTTXCGCT 1922   000000 00                GAS      0.08  0.00  0.00  2033.   0.
   2.80  1.03  1.03      470.        350.        820.     4.92     3.67     8.59
   0.202    0.150    0.352       0.000       0.000         0.456         0.124
  ERCTTXCGCT 2312   000000 00                GAS      0.10  0.00  0.00    10.   0.
   2.80  1.03  1.03        7.         16.         22.     0.07     0.15     0.21
   0.003    0.007    0.011       0.000       0.000         0.011         0.003
  ERCTTXCGCT 2711   000000 00                GAS      0.10  0.00  0.00    22.   0.
   2.80  1.03  1.03       33.         57.         90.     0.28     0.49     0.77
   0.014    0.025    0.039       0.000       0.000         0.041         0.011
  ERCTTXCGCC 1911   000000 00                GAS      0.13  0.00  0.00    19.   0.
  13.90  1.03  1.03       13.         29.         42.     0.07     0.16     0.23
```

```
   0.004    0.010    0.015       0.000       0.000         0.012         0.003
  ERCTTXCGCC 1912   000000 00              GAS      0.13  0.00  0.00    28.   0.
  13.90  1.03  1.03        6.         5.        11.     0.05     0.04     0.08
   0.003    0.002    0.005       0.000       0.000         0.004         0.001
  ERCTTXCGCC 1913   000000 00              GAS      0.13  0.00  0.00    18.   0.
  14.90  1.03  1.03        4.         3.         7.     0.04     0.03     0.07
   0.002    0.002    0.004       0.000       0.000         0.004         0.001
  ERCTTXCGCC 1921   000000 00              GAS      0.13  0.00  0.00   368.   0.
  14.90  1.03  1.03       82.       189.       272.     0.51     1.18     1.69
   0.034    0.077    0.111       0.000       0.000         0.090         0.025
  ERCTTXCGCC 1922   000000 00              GAS      0.04  0.00  0.00  2500.   0.
  14.00  1.03  1.03     1680.      3867.      5547.    12.71    29.24    41.95
   0.273    0.629    0.902       0.000       0.000         2.226         0.607
  ERCTTXCGCC 1923   000000 00              GAS      0.13  0.00  0.00   110.   0.
  14.30  1.03  1.03       25.        19.        43.     0.23     0.17     0.40
   0.015    0.011    0.026       0.000       0.000         0.021         0.006
  ERCTTXCGCC 2313   000000 00              GAS      0.13  0.00  0.00     3.   0.
  14.00  1.03  1.03        2.         5.         7.     0.02     0.04     0.06
   0.001    0.003    0.004       0.000       0.000         0.003         0.001
  ERCTTXCGCC 2322   000000 00              GAS      0.02  0.00  0.00  1513.   0.
  13.90  1.03  1.03     4572.      3901.      8473.    34.29    29.26    63.55
   0.343    0.293    0.635       0.000       0.000         3.373         0.920
  ERCTTXCGCC 2323   000000 00              GAS      0.13  0.00  0.00   246.   0.
  13.90  1.03  1.03      165.       380.       546.     1.70     3.92     5.62
   0.111    0.256    0.368       0.000       0.000         0.298         0.081
  ERCTTXCGCC 2711   000000 00              GAS      0.13  0.00  0.00    81.   0.
  13.90  1.03  1.03      363.       278.       641.     1.98     1.52     3.49
   0.129    0.099    0.229       0.000       0.000         0.185         0.051
  ERCTTXCGCC 2722   000000 00              GAS      0.06  0.00  0.00   782.   0.
  13.90  1.03  1.03     1577.      2016.      3593.    12.28    15.70    27.98
   0.362    0.463    0.825       0.000       0.000         1.485         0.405
  ERCTTXCGCC 3513   000000 00              GAS      0.13  0.00  0.00    77.   0.
  14.90  1.03  1.03       52.       119.       171.     0.53     1.23     1.77
   0.035    0.081    0.116       0.000       0.000         0.094         0.026
  ERCTTXCGCC 3523   000000 00              GAS      0.13  0.00  0.00   217.   0.
  14.90  1.03  1.03      146.       336.       481.     1.43     3.30     4.74
   0.094    0.216    0.310       0.000       0.000         0.251         0.069
Cgn_Oil                        24
Cgn_Other                      25
  ERCTTXCGFWT192    000000 00              WASTE    0.42  0.00 20.87   162.   0.
 103.60  0.00  0.00       36.        28.        64.     0.21     0.16     0.38
   0.045    0.034    0.079       0.000       0.004         0.000         0.000
  ERCT  CGOTH00     000000 00              NONE     0.00  0.00  0.00     1.   0.
 103.60  0.00  0.00        4.         3.         8.     0.03     0.03     0.06
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
  ERCTTXTSBLU2241302020110 02     LD01     LF2: 9.8 0.30  0.29  9.79   563.  19.
  32.27  3.64  3.64     2336.      1535.      3871.    24.86    16.33    41.19
   3.729    2.450    6.179       5.973       0.202         4.025         1.098
  ERCTTXTSBLU2241302020110 02     LD01     LF1: 5.9 0.30  0.29  5.88   563.  19.
  32.27  3.64  3.64        0.       321.       321.     0.00     3.41     3.41
   0.000    0.512    0.512       0.495       0.010         0.333         0.091
  ERCTTXTSBLU2241302020410 02     LD01     LF2: 9.8 0.30  0.29  9.79  1116.  19.
  32.27  3.64  3.64        0.      3679.      3679.     0.00    39.27    39.27
```

```
   0.000    5.890    5.890       5.694       0.192         3.837         1.046
  ERCTTXTSBLU2241302020410 02     LD01     LF1: 5.9 0.30  0.29  5.88  1116.  19.
  32.27  3.64  3.64     4632.         0.      4632.    49.44     0.00    49.44
   7.416    0.000    7.416       7.169       0.145         4.831         1.317
  ERCTTXTSBLU2242302020410 02     LD01     LF2: 9.8 0.30  0.29  9.79   242.  20.
  32.37  3.73  3.73     1005.       798.      1803.    11.18     8.88    20.05
   1.660    1.318    2.978       2.907       0.098         1.959         0.534
Ret.ExistSCR & Scrub          38
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
  ERCTTXTSASU1941291020310 01     SCR2     SB2: 6.5 0.05  1.00  1.75   650.   7.
  22.80  2.41  2.41     1197.      1377.      2574.    12.28    14.13    26.41
   0.313    0.360    0.674      13.207       0.023         2.548         0.695
  ERCTTXTSASU1941292020310 01     SCR1     SB2: 6.5 0.05  1.00  1.75  1210.   7.
  25.00  2.41  2.41     2250.      2564.      4814.    22.58    25.73    48.32
   0.565    0.643    1.208      24.159       0.042         4.662         1.271
  ERCTTXTSASU2341292020110 01     SCR1     SB2: 6.5 0.05  0.73  6.29   810.   8.
  24.80  2.45  2.45     3362.      2670.      6032.    34.27    27.22    61.49
   0.857    0.680    1.537      22.473       0.193         5.932         1.618
Ret.ExistScrub & SCR          41
  ERCTTXTSXLS2341302020103 02     SCR1     LF2: 9.8 0.05  0.39  5.48  1440.   7.
  36.00  3.80  3.80     5976.      4746.     10723.    61.28    48.67   109.95
   1.532    1.217    2.749      21.523       0.301        10.743         2.930
  ERCTTXTSXLS2342302020103 02     SCR1     LF2: 9.8 0.05  0.77  5.48   189.   7.
  41.40  3.81  3.81      784.       622.      1406.     8.72     6.93    15.64
   0.218    0.173    0.391       6.057       0.043         1.529         0.417
  ERCTTXTSXSS1941292020303 01     SCR1     SD2: 6.7 0.05  0.14  1.01   555.   7.
  36.00  3.82  3.82     1032.      1405.      2437.    10.54    14.35    24.88
   0.263    0.359    0.622       1.759       0.013         2.401         0.655
  ERCTTXTSXSS2341292020103 01     SCR1     SD2: 6.7 0.05  0.07  2.28   435.   8.
  36.00  3.85  3.85     1805.      1434.      3239.    18.05    14.34    32.39
   0.451    0.358    0.810       1.134       0.037         3.125         0.852
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  ERCTTXTSBLU2242302020410 02     RD01     LF2: 9.8 0.05  0.29  9.79   311.  27.
  32.77  4.61  4.61        0.      1025.      1025.     0.00    11.40    11.40
   0.000    0.285    0.285       1.653       0.056         1.114         0.304
  ERCTTXTSBLU2242302020410 02     RD01     LF1: 5.9 0.05  0.29  5.88   311.  27.
  32.77  4.61  4.61     1291.         0.      1291.    14.36     0.00    14.36
   0.359    0.000    0.359       2.082       0.042         1.403         0.383
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
  ERCTTXSTHSU2021   000000 00     SCN1     GAS      0.10  0.00  0.00   185.   1.
  20.70  0.00  3.02        0.       195.       195.     0.00     1.94     1.94
```

```
   0.000    0.094    0.094       0.000       0.000         0.103         0.028
  ERCTTXSTHSU2421   000000 00     SCN1     GAS      0.16  0.00  0.00   795.   1.
  20.30  3.02  3.02     1056.      1467.      2523.    10.25    14.25    24.51
   0.810    1.126    1.936       0.000       0.000         1.301         0.355
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------
Year: 2010, Region: MACE     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  MACE  TSXBD0141031010107 01              BG1: 8.0 0.39  0.30  3.70   155.   0.
  43.10  3.85  3.85      643.       428.      1071.     6.37     4.24    10.61
   1.229    0.818    2.047       1.591       0.020         0.988         0.269
  MACE  TSZBD0241032020707 01              BG1: 8.0 0.27  0.16  4.66   144.   0.
  43.10  3.85  3.85      598.       398.       995.     6.19     4.12    10.30
   0.823    0.547    1.370       0.850       0.024         0.959         0.262
  MACE  TSDBA0141011020206 01              BE3:18.4 0.08  0.22 11.05   642.   0.
  43.50  3.91  3.91     2664.      1773.      4437.    24.66    16.40    41.06
   1.036    0.689    1.725       4.517       0.227         3.824         1.043
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
  MACEDETSABN0241032020102 01              BA2: 5.2 0.20  1.10  3.31   403.   0.
  22.60  2.45  2.45     1401.      1113.      2514.    14.41    11.45    25.86
   1.463    1.162    2.625      14.225       0.043         2.408         0.657
  MACE  TSBBN0231032020102 01              BA2: 5.2 0.26  1.10  3.31    84.   0.
  32.20  2.45  2.45      292.       232.       524.     3.02     2.40     5.42
   0.385    0.306    0.691       2.980       0.009         0.505         0.138
  MACE  TSBBN0241032020102 01              BA2: 5.2 0.22  1.10  3.31   167.   0.
  32.20  2.45  2.45      581.       461.      1042.     5.66     4.50    10.16
   0.620    0.492    1.113       5.588       0.017         0.946         0.258
  MACEDETSCBN0241032020102 01              BA2: 5.2 0.28  1.10  3.31   162.   0.
  26.60  2.45  2.45      563.       447.      1010.     5.20     4.13     9.34
   0.736    0.585    1.321       5.135       0.015         0.869         0.237
  MACEVATOLBO0332092020202 01              BA2: 5.2 0.20  1.10  4.65   176.   0.
  32.30  1.54  1.54      612.       373.       985.     7.26     4.42    11.68
   0.737    0.449    1.186       6.425       0.027         1.088         0.297
  MACEVATOLBO0341092020202 01              BA2: 5.2 0.23  1.10  4.65   306.   0.
  32.30  1.54  1.54     1270.       845.      2115.    12.27     8.16    20.43
```

```
   1.399    0.930    2.329      11.236       0.048         1.902         0.519
  MACE  TCOLC0141012050301 01              BA2: 5.2 0.05  1.10  0.57   200.   0.
  12.20  2.51  2.51      695.       552.      1247.     7.23     5.74    12.97
   0.177    0.141    0.318       7.136       0.004         1.208         0.330
Unscrubbed Coal                 4
  MACE  TSCBU0131032020310 01              BA2: 5.2 0.39  1.10  0.57    80.   0.
  32.00  1.54  1.54      278.       221.       499.     2.86     2.28     5.14
   0.564    0.448    1.013       2.827       0.001         0.479         0.131
  MACEDETSCBU0231032020110 01              BA2: 5.2 0.40  1.10  3.31   178.   0.
  32.00  1.54  1.54      619.       491.      1110.     6.17     4.90    11.07
   1.241    0.985    2.226       6.091       0.018         1.031         0.281
  MACENJTSLBU0112032020710 01              BA2: 5.2 0.28  1.10  5.17    23.   0.
  26.40  1.54  1.54       95.        64.       159.     1.10     0.73     1.83
   0.154    0.102    0.256       1.005       0.005         0.170         0.046
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  MACE  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1155.   0.
 191.50  0.98  0.98     4925.      4237.      9162.    53.10    45.68    98.79
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1112.   0.
 165.10  0.64  0.64     5657.      3442.      9099.    59.03    35.92    94.96
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1109.   0.
 165.10  0.64  0.64     5448.      3722.      9171.    57.45    39.25    96.70
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1134.   0.
  89.40  0.46  0.46     5298.      4160.      9458.    56.23    44.15   100.38
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1207.   0.
  89.40  0.46  0.46     5879.      4188.     10067.    61.77    44.01   105.78
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   605.   0.
 254.60  1.32  1.32     2215.      2219.      4434.    23.79    23.84    47.63
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1150.   0.
 141.50  0.98  0.98     4831.      4219.      9049.    51.63    45.08    96.71
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1131.   0.
 113.80  0.78  0.78     5754.      3160.      8914.    62.27    34.20    96.47
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  MACE  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   522.   0.
  15.50  0.00  0.00     2346.      1770.      4115.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  MACE  CC   0122   000000 00              GAS      0.04  0.00  0.00  3085.   0.
  13.90  1.03  1.03     5511.      4148.      9659.    42.54    32.02    74.56
   0.830    0.624    1.454       0.000       0.000         3.957         1.079
  MACE  CC   0123   000000 00              GAS      0.10  0.00  0.00   762.   0.
  14.50  0.00  1.03        0.       131.       131.     0.00     1.37     1.37
   0.000    0.070    0.070       0.000       0.000         0.073         0.020
  MACE  CC   0222   000000 00              GAS      0.04  0.00  0.00  1287.   0.
  13.90  1.03  1.03      865.       663.      1528.     6.68     5.12    11.80
   0.120    0.092    0.212       0.000       0.000         0.626         0.171
IGCC                           10
Turbine                        11
  MACE  CT   0122   000000 00              GAS      0.08  0.00  0.00  1024.   0.
   3.40  0.00  1.03        0.       176.       176.     0.00     1.94     1.94
   0.000    0.082    0.082       0.000       0.000         0.103         0.028
  MACE  CT   0212   000000 00              GAS      0.10  0.00  0.00     3.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  CT   0222   000000 00              GAS      0.09  0.00  0.00  1923.   0.
   3.30  0.00  1.03        0.       236.       236.     0.00     2.60     2.60
```

```
   0.000    0.117    0.117       0.000       0.000         0.138         0.038
  MACEVACT   0312   000000 00              GAS      0.11  0.00  0.00     4.   0.
   4.10  1.03  1.03        1.         2.         3.     0.01     0.02     0.03
   0.000    0.001    0.002       0.000       0.000         0.001         0.000
Biomass                          12
  MACE  BIOMS00  44 000000 00              B1-: 0.6 0.02  0.08  0.57     8.   0.
  44.80  5.36  5.36       35.        27.        61.     0.28     0.21     0.49
   0.003    0.002    0.005       0.020       0.000         0.000         0.000
  MACE  BIOCC0     (a)                     B1-: 0.6 0.02  0.08  0.57    28. 192.
  44.80  5.34  5.34      124.        90.       214.     1.02     0.74     1.75
   0.010    0.007    0.018       0.070       0.001         0.000         0.000
Geothermal                       13
Landfill Gas                     14
  MACE  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    24.   0.
  78.60 10.48 10.48      107.        82.       189.     1.35     1.03     2.37
   0.166    0.126    0.292       0.000       0.000         0.000         0.000
  MACE  LG   0     (a)                     WASTE    0.25  0.00  0.00    57. 174.
  78.60 10.48 10.48      247.       178.       425.     2.47     1.78     4.25
   0.303    0.219    0.522       0.000       0.000         0.000         0.000
Wind                             15
  MACE  WIND 00     000000 00              NONE     0.00  0.00 71.00    14.   0.
  26.40  0.00  0.00       20.        11.        31.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  WIN410     (a)                     NONE     0.00  0.00 71.00    63. 139.
  26.40  0.00  0.00      109.        56.       165.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                        16
  MACE  FCELL00     000000 00              GAS      0.40  0.00  0.00    15.   0.
  15.00  2.06  2.06       10.         8.        18.     0.08     0.06     0.13
   0.015    0.011    0.027       0.000       0.000         0.007         0.002
Solar                            17
Non Fossil_Other                 18
  MACE  OTHER00     000000 00              NONE     0.00  0.00 71.00   257.   0.
 103.60  0.00  0.00     1133.       893.      2026.    12.46     9.83    22.29
   0.000    0.000    0.000       0.000       0.791         0.000         0.000
Fossil_Other                     19
Pump Storage                     20
  MACE  PUMPS00     000000 00              NONE     0.00  0.00 71.00  1280.   0.
   6.50  0.00  0.00      264.       199.       463.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                     21
Cgn_Coal                         22
  MACE  CGCOU0141012050710 01              BA2: 5.2 0.49  1.10  5.17   187.   0.
  11.70  1.54  1.54      757.       512.      1269.     6.33     4.28    10.60
   1.550    1.048    2.598       5.833       0.027         0.988         0.269
  MACE  CGCOU0211412050710 01              BA2: 5.2 0.40  1.10  5.17     8.   0.
  17.40  1.54  1.54       32.        26.        59.     0.29     0.23     0.52
   0.058    0.047    0.104       0.286       0.001         0.048         0.013
Cgn_Gas                          23
  MACE  CGCT 0111   000000 00              GAS      0.11  0.00  0.00     6.   0.
   2.80  1.03  1.03        4.         3.         7.     0.04     0.03     0.06
   0.002    0.001    0.003       0.000       0.000         0.003         0.001
  MACE  CGCT 0112   000000 00              GAS      0.11  0.00  0.00    13.   0.
   2.80  1.03  1.03        3.         7.        10.     0.03     0.06     0.09
   0.002    0.004    0.005       0.000       0.000         0.005         0.001
  MACE  CGCT 0122   000000 00              GAS      0.08  0.00  0.00   170.   0.
   2.80  0.00  1.03        0.        29.        29.     0.00     0.32     0.32
   0.000    0.013    0.013       0.000       0.000         0.017         0.005
  MACE  CGCT 0222   000000 00              GAS      0.08  0.00  0.00    88.   0.
   2.80  0.00  1.03        0.        15.        15.     0.00     0.17     0.17
   0.000    0.007    0.007       0.000       0.000         0.009         0.002
  MACE  CGCC 0111   000000 00              GAS      0.10  0.00  0.00    21.   0.
  13.90  1.03  1.03       71.        54.       125.     0.47     0.36     0.82
   0.024    0.019    0.043       0.000       0.000         0.044         0.012
  MACE  CGCC 0112   000000 00              GAS      0.10  0.00  0.00    16.   0.
```

```
  13.90  1.03  1.03       11.         8.        19.     0.09     0.07     0.16
   0.005    0.004    0.008       0.000       0.000         0.008         0.002
  MACE  CGCC 0113   000000 00              GAS      0.10  0.00  0.00    76.   0.
  13.90  1.03  1.03       17.        39.        56.     0.16     0.37     0.52
   0.008    0.019    0.028       0.000       0.000         0.028         0.008
  MACE  CGCC 0121   000000 00              GAS      0.10  0.00  0.00    41.   0.
  13.90  1.03  1.03      138.       106.       244.     0.91     0.70     1.62
   0.048    0.037    0.085       0.000       0.000         0.086         0.023
  MACE  CGCC 0122   000000 00              GAS      0.10  0.00  0.00  1517.   0.
  13.90  1.03  1.03     1020.       781.      1801.     8.17     6.26    14.43
   0.429    0.329    0.758       0.000       0.000         0.766         0.209
  MACE  CGCC 0123   000000 00              GAS      0.10  0.00  0.00   628.   0.
  14.20  1.03  1.03      101.       173.       274.     0.96     1.65     2.61
   0.051    0.086    0.137       0.000       0.000         0.138         0.038
  MACE  CGCC 0221   000000 00              GAS      0.19  0.00  0.00   188.   0.
  13.90  1.03  1.03      843.       485.      1327.     4.80     2.76     7.56
   0.444    0.255    0.699       0.000       0.000         0.401         0.109
  MACE  CGCC 0222   000000 00              GAS      0.02  0.00  0.00   725.   0.
  13.90  1.03  1.03     2037.      1121.      3158.    15.27     8.41    23.68
   0.153    0.084    0.237       0.000       0.000         1.257         0.343
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
  MACE  TSZBS0241032020203 01     SCR1     BE3:18.4 0.05  0.15  1.84   581.   9.
  43.40  3.89  3.89     2411.      1915.      4326.    24.06    19.11    43.18
   0.602    0.478    1.079       3.277       0.040         4.021         1.097
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
  MACE  TSABA0141011020206 01     HG01     BE3:18.4 0.05  0.22  1.84   600.   4.
  48.30  4.17  4.17     2490.      1978.      4468.    23.65    18.78    42.43
   0.544    0.432    0.976       4.667       0.039         3.951         1.078
Ret.ExistNOx&ExistScrub&ACI    62
```

```
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: MACW     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  MACW  TCOLA0241052050705 01              BG1: 8.0 0.01  0.25  0.80   520.   0.
  23.60  3.91  3.91     2158.      1714.      3872.    19.42    15.43    34.85
   0.107    0.085    0.192       4.356       0.014         3.245         0.885
  MACW  TSFBA0241412020105 01              BE3:18.4 0.05  0.11  1.84   650.   0.
  43.30  3.91  3.91     2698.      2142.      4840.    26.39    20.96    47.35
   0.594    0.472    1.065       2.604       0.044         4.409         1.203
Scrubbed Coal                  2
  MACW  TCOLS0231412050304 01              BE3:18.4 0.40  0.53  7.37    32.   0.
  23.10  2.94  2.94      133.       105.       238.     1.38     1.10     2.48
   0.277    0.220    0.497       0.654       0.009         0.231         0.063
Unscrubbed Coal_NOx            3
  MACW  TSZBN0241031020102 01              BA2: 5.2 0.37  1.10  3.31   136.   0.
  32.20  2.45  2.45      473.       288.       761.     4.71     2.87     7.58
   0.881    0.537    1.418       4.171       0.013         0.706         0.193
Unscrubbed Coal                4
  MACW  TCOLU0211412050210 01              BD2:12.5 0.40  1.50 12.54    82.   0.
  32.00  1.54  1.54      340.       270.       611.     3.54     2.81     6.35
   0.710    0.564    1.273       4.763       0.040         0.591         0.161
  MACW  TCOLU0231412050710 01              BA2: 5.2 0.40  1.10  5.17    82.   0.
  11.70  1.54  1.54      285.       226.       511.     2.96     2.35     5.32
   0.594    0.472    1.067       2.926       0.014         0.495         0.135
  MACW  TCOLU0241412050710 01              BA2: 5.2 0.40  1.10  5.17   218.   0.
  11.70  1.54  1.54      758.       536.      1294.     7.88     5.57    13.46
   1.580    1.118    2.698       7.401       0.035         1.253         0.342
  MACW  TOLBU0231032020110 01              BA2: 5.2 0.37  1.10  3.31   241.   0.
  32.00  1.54  1.54      399.       243.       643.     4.15     2.53     6.68
   0.768    0.468    1.236       3.673       0.011         0.622         0.170
  MACWPATSABU0241032020110 01              BA2: 5.2 0.45  1.10  3.31   472.   0.
```

```
  32.00  1.54  1.54     1641.      1000.      2641.    16.58    10.11    26.69
   3.698    2.254    5.952      14.679       0.044         2.485         0.678
  MACW  TSCBU0241032020110 01              BA2: 5.2 0.40  1.10  3.31  1356.   0.
  29.00  1.54  1.54     4714.      3744.      8458.    43.85    34.83    78.68
   8.792    6.983   15.775      43.272       0.130         7.327         1.998
  MACW  TSCBU0241032020310 01              BA2: 5.2 0.38  1.10  0.57   321.   0.
  32.00  1.54  1.54     1332.       886.      2218.    12.43     8.27    20.71
   2.344    1.559    3.903      11.388       0.006         1.928         0.526
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  MACW  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1140.   0.
  92.40  0.57  0.57     5471.      3734.      9205.    57.47    39.23    96.70
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACW  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1146.   0.
  92.40  0.57  0.57     5830.      3337.      9167.    60.96    34.90    95.86
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACW  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   806.   0.
 181.30  0.93  0.93     3650.      2622.      6272.    40.69    29.23    69.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  MACW  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   649.   0.
  14.90  0.00  0.00     1512.       632.      2144.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  MACW  CC   0222   000000 00              GAS      0.02  0.00  0.00  2689.   0.
  13.90  1.03  1.03     5422.      1385.      6806.    40.66    10.38    51.05
   0.407    0.104    0.510       0.000       0.000         2.709         0.739
IGCC                           10
Turbine                        11
Biomass                        12
  MACW  BIOMS00  44 000000 00              B1-: 0.6 0.02  0.08  0.57    17.   0.
  44.80  5.36  5.36       74.        57.       131.     0.68     0.53     1.20
   0.007    0.005    0.012       0.048       0.000         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  MACW  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     1.   0.
  78.60 10.48 10.48        4.         3.         8.     0.06     0.05     0.11
   0.008    0.006    0.013       0.000       0.000         0.000         0.000
Wind                           15
  MACW  WIND 00     000000 00              NONE     0.00  0.00 71.00    10.   0.
  26.40  0.00  0.00       17.        10.        27.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  MACW  OTHER00     000000 00              NONE     0.00  0.00 65.04   119.   0.
 103.60  0.00  0.00      525.       414.       938.     5.77     4.55    10.32
   0.000    0.000    0.000       0.000       0.336         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
  MACW  PUMPS00     000000 00              NONE     0.00  0.00 71.00   391.   0.
   6.50  0.00  0.00      125.       473.       598.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
  MACW  CGCOU0211412050710 01              BA2: 5.2 0.40  1.10  5.17    44.   0.
  21.10  1.54  1.54      178.       144.       322.     1.56     1.26     2.81
   0.312    0.252    0.563       1.546       0.007         0.262         0.071
  MACW  CGCOU0231412050710 01              BA2: 5.2 0.40  1.10  5.17    82.   0.
  11.70  1.54  1.54      332.       268.       600.     2.66     2.15     4.81
   0.534    0.431    0.964       2.645       0.012         0.448         0.122
  MACW  CGCOU0232412050710 01              BA2: 5.2 0.40  1.10  5.17   120.   0.
  15.50  1.54  1.54      407.       252.       659.     4.42     2.74     7.16
   0.887    0.549    1.436       3.939       0.019         0.667         0.182
```

```
  MACW  CGCOU0241412050710 01              BA2: 5.2 0.40  1.10  5.17   101.   0.
  11.70  1.54  1.54      409.       276.       685.     3.50     2.36     5.86
   0.701    0.474    1.175       3.222       0.015         0.546         0.149
  MACW  CGCOS0231412050304 01              BE3:18.4 0.40  0.11  7.37    42.   0.
  35.60  2.94  2.94      170.       137.       307.     1.51     1.22     2.73
   0.303    0.245    0.548       0.150       0.010         0.255         0.069
  MACW  CGCOS0232412050304 01              BE3:18.4 0.40  0.53  7.37   100.   0.
  23.10  2.94  2.94      405.       274.       678.     4.41     2.98     7.38
   0.883    0.597    1.480       1.949       0.027         0.688         0.188
  MACW  CGCOD0231412050307 01              BE3:18.4 0.26  0.53  0.55    87.   0.
  23.30  3.84  3.84      352.       284.       636.     2.82     2.28     5.10
   0.368    0.297    0.666       1.347       0.001         0.475         0.130
Cgn_Gas                        23
  MACW  CGCT 0212   000000 00              GAS      0.13  0.00  0.00    33.   0.
   2.80  0.00  1.03        0.         6.         6.     0.00     0.06     0.06
   0.000    0.004    0.004       0.000       0.000         0.003         0.001
  MACW  CGCC 0213   000000 00              GAS      0.19  0.00  0.00    80.   0.
  13.90  0.00  1.03        0.        14.        14.     0.00     0.13     0.13
   0.000    0.012    0.012       0.000       0.000         0.007         0.002
  MACW  CGCC 0223   000000 00              GAS      0.19  0.00  0.00   206.   0.
  13.90  0.00  1.03        0.        35.        35.     0.00     0.33     0.33
   0.000    0.030    0.030       0.000       0.000         0.017         0.005
Cgn_Oil                        24
Cgn_Other                      25
  MACW  CGBIO00  44 000000 00              B1-: 0.6 0.02  0.08  0.57    11.   0.
  44.80  5.36  5.36       48.        37.        85.     0.38     0.29     0.68
   0.004    0.003    0.007       0.027       0.000         0.000         0.000
  MACW  CGOTH00     000000 00              NONE     0.00  0.00 17.04    25.   0.
 103.60  0.00  0.00      108.        84.       192.     0.45     0.35     0.80
   0.000    0.000    0.000       0.000       0.007         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
  MACW  TSHBC0241411020101 01     LO01     BG3:28.7 0.06  0.25  2.87   607.  21.
  35.28  3.87  3.87     2519.      2001.      4520.    24.35    19.34    43.70
   0.792    0.629    1.420       5.462       0.063         4.069         1.110
  MACW  TSHBC0241412020101 01     LO01     BG3:28.7 0.04  0.25  2.87  2075.  20.
  34.78  3.84  3.84        0.      6838.      6838.     0.00    63.83    63.83
   0.000    1.404    1.404       7.979       0.092         5.944         1.621
  MACW  TSHBC0241412020101 01     LO01     BF3:18.7 0.04  0.15  1.87  2075.  20.
  34.78  3.84  3.84     8610.         0.      8610.    80.37     0.00    80.37
   1.768    0.000    1.768       6.028       0.075         7.484         2.041
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
  MACWPATSABS0241032020103 01     SCR1     BE3:18.4 0.05  0.11  1.84   125.  12.
  43.70  4.01  4.01      519.       412.       931.     5.44     4.32     9.76
   0.136    0.108    0.244       0.537       0.009         0.909         0.248
  MACW  TSYBS0241412020103 01     SCR1     BE3:18.4 0.05  0.09  1.84  1700.   6.
  43.00  3.78  3.78     7055.      5603.     12659.    64.84    51.50   116.33
   1.621    1.287    2.908       5.119       0.107        10.833         2.955
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  MACW  TSHBU0241412020110 01     SCR1LO01 BG3:28.7 0.05  0.25  2.87  1664.  25.
```

```
  36.93  3.74  3.74        0.      4699.      4699.     0.00    45.58    45.58
   0.000    1.140    1.140       5.698       0.065         4.245         1.158
  MACW  TSHBU0241412020110 01     SCR1LO01 BF3:18.7 0.05  0.15  1.87  1664.  25.
  36.93  3.74  3.74     6907.       787.      7694.    67.00     7.63    74.63
   1.675    0.191    1.866       5.597       0.070         6.950         1.895
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: MACS     (Emissions By Plant)
--------------------------------------------------
```

	NOx			SO2		MER	CO2		Carbon		
	Emission		Generation	Emission	Emission		Trillion Emission (lb/MBtu)	Emission (lb/TBtu)	Emission (MW)	$ /KWyr	VOM Mill/KWh
	(1000 Tons)		(GWh)	(1000 Tons)	(Tons)		(Mil Tonnes) (Btu)	(Mil Tonnes)			
Unit					Fuel	NOx	SO2	MERCURY	Cap.	Cap.	FO&M
	WINTER	SUMMER	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total
Scrubbed Coal_NOx											
Scrubbed Coal											
Unscrubbed Coal_NOx											

```
  MACSMDTSHBO0241081010302 01              BD2:12.5 0.51  1.50  1.38   380.   0.
  32.30  1.54  1.54     1321.      1049.      2370.    13.48    10.71    24.19
   3.411    2.709    6.120      18.143       0.017         2.253         0.614
```

```
Unscrubbed Coal                 4
  MACS  TSEBU0241072020110 01              BA2: 5.2 0.41  1.10  3.31   135.   0.
  32.00  1.54  1.54      469.       286.       755.     4.70     2.87     7.57
   0.959    0.585    1.544       4.162       0.013         0.705         0.192
  MACS  TSGBU0241082020110 01              BD2:12.5 0.36  1.50  8.03   546.   0.
  32.00  1.54  1.54     2266.      1508.      3774.    21.27    14.15    35.42
   3.882    2.583    6.465      26.566       0.142         3.299         0.900
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  MACS  NUKE 00    9000000 00              NUC      0.00  0.00  0.00   875.   0.
 161.00  0.61  0.61     4352.      2860.      7212.    47.25    31.05    78.30
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACS  NUKE 00    9000000 00              NUC      0.00  0.00  0.00   850.   0.
 161.00  0.61  0.61     4141.      2712.      6854.    45.05    29.50    74.56
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  MACS  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00    18.   0.
  15.50  0.00  0.00       43.        16.        59.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  MACS  CC   0222   000000 00              GAS      0.08  0.00  0.00   142.   0.
  13.90  1.03  1.03       95.       163.       258.     0.81     1.39     2.20
   0.032    0.055    0.088       0.000       0.000         0.117         0.032
IGCC                           10
Turbine                        11
  MACS  CT   0211   000000 00              GAS      0.13  0.00  0.00     6.   0.
   2.80  1.03  1.03        4.         3.         7.     0.04     0.03     0.07
   0.002    0.002    0.004       0.000       0.000         0.004         0.001
  MACS  CT   0212   000000 00              GAS      0.10  0.00  0.00    45.   0.
   3.60  1.03  1.03       31.        23.        55.     0.30     0.23     0.53
   0.015    0.011    0.026       0.000       0.000         0.028         0.008
  MACS  CT   0214   000000 00              GAS      0.11  0.00  0.00   378.   0.
  11.20  1.03  1.03       60.       196.       255.     0.85     2.79     3.64
   0.047    0.153    0.200       0.000       0.000         0.193         0.053
  MACS  CT   0222   000000 00              GAS      0.11  0.00  0.00   578.   0.
   4.10  1.03  1.03      134.       299.       433.     1.47     3.30     4.77
   0.082    0.185    0.267       0.000       0.000         0.253         0.069
  MACS  CT   0223   000000 00              GAS      0.13  0.00  0.00   208.   0.
  11.20  1.03  1.03       48.       108.       156.     0.64     1.43     2.07
   0.041    0.092    0.132       0.000       0.000         0.110         0.030
  MACS  CT   0224   000000 00              GAS      0.11  0.00  0.00   920.   0.
   9.80  0.00  1.03        0.       212.       212.     0.00     3.01     3.01
   0.000    0.166    0.166       0.000       0.000         0.160         0.044
  MACSVACT   0322   000000 00              GAS      0.08  0.00  0.00   169.   0.
   2.80  1.03  1.03      115.        87.       202.     1.25     0.96     2.21
   0.050    0.038    0.088       0.000       0.000         0.117         0.032
Biomass                        12
Geothermal                     13
Landfill Gas                   14
  MACS  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     4.   0.
  78.60 10.48 10.48       18.        14.        32.     0.24     0.19     0.43
   0.030    0.023    0.053       0.000       0.000         0.000         0.000
Wind                           15
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  MACS  OTHER00     000000 00              NONE     0.00  0.00 71.00    55.   0.
 103.60  0.00  0.00      242.       191.       434.     2.67     2.10     4.77
   0.000    0.000    0.000       0.000       0.169         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
```

```
  MACS  CGCC 0223   000000 00              GAS      0.08  0.00  0.00   277.   0.
  13.90  1.03  1.03      186.       143.       329.     1.83     1.40     3.23
   0.073    0.056    0.129       0.000       0.000         0.172         0.047
Cgn_Oil                        24
Cgn_Other                      25
  MACS  CGOTH00     000000 00              NONE     0.00  0.00 71.00    54.   0.
 103.60  0.00  0.00      234.       181.       415.     0.98     0.76     1.74
   0.000    0.000    0.000       0.000       0.062         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
  MACS  TSEBC0241072020101 01     ML02     BF3:18.7 0.05  0.12  1.87   317.  28.
  43.50  3.45  3.45     1316.       977.      2293.    12.29     9.12    21.41
   0.277    0.205    0.482       1.285       0.020         1.994         0.544
  MACS  TSEBC0241072020101 01     ML02     BF2:11.1 0.05  0.12  1.11   317.  28.
  43.50  3.45  3.45        0.        68.        68.     0.00     0.64     0.64
   0.000    0.014    0.014       0.038       0.000         0.060         0.016
  MACS  TSEBC0241072020201 01     LO01     BG1: 8.0 0.05  0.25  0.80  1264.  21.
  23.02  3.93  3.93     3543.      4166.      7709.    36.27    42.65    78.92
   0.834    0.981    1.815       9.865       0.032         7.349         2.004
  MACS  TSEBC0241072020201 01     LO01     BF2:11.1 0.05  0.15  1.11  1264.  21.
  23.02  3.93  3.93     1702.         0.      1702.    17.43     0.00    17.43
   0.401    0.000    0.401       1.307       0.010         1.623         0.443
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  MACSMDTSDBU0241081020110 01     SCR2ML02 BE2:10.4 0.06  0.09  1.04  1808.  32.
  38.42  3.37  3.37     7505.      5960.     13465.    69.90    55.51   125.41
   2.237    1.776    4.013       5.518       0.066        11.679         3.185
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
```

```
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: WUMS     (Emissions By Plant)
---------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  WUMSWITOLBS1312162030304 01              BG1: 8.0 0.34  2.51  0.40    22.   0.
  43.00  2.94  2.94       91.        73.       164.     1.02     0.81     1.82
   0.172    0.137    0.308       2.290       0.000         0.170         0.046
  WUMSWITSGBS1231392020104 01              BD1: 5.1 0.30  0.72  2.79    80.   0.
  43.00  2.94  2.94      278.       169.       448.     2.86     1.74     4.60
   0.429    0.261    0.690       1.652       0.006         0.428         0.117
  WUMS  TSXBS0432392020304 01              BD1: 5.1 0.31  0.08  0.25    44.   0.
  35.60  2.94  2.94      153.       121.       274.     1.84     1.46     3.30
   0.284    0.226    0.510       0.129       0.000         0.308         0.084
Unscrubbed Coal_NOx            3
  WUMSWITSDSO1332392020102 01              SB1: 4.5 0.45  0.68  4.41    82.   0.
  32.30  1.54  1.54      219.       174.       392.     2.35     1.86     4.21
   0.526    0.418    0.944       1.441       0.009         0.406         0.111
Unscrubbed Coal                4
  WUMS  TCOLU0411392020710 01              BB2: 4.1 0.46  1.00  4.10    25.   0.
  32.00  1.54  1.54      104.        82.       186.     1.08     0.86     1.94
   0.248    0.197    0.445       0.968       0.004         0.180         0.049
  WUMSWITCOLU1311162040310 01              SB2: 6.5 0.37  1.00  1.75    44.   0.
  32.00  1.54  1.54      183.       145.       328.     1.90     1.51     3.41
   0.353    0.281    0.634       1.704       0.003         0.329         0.090
  WUMSWITCOLU1311162050710 01              SB2: 6.5 0.37  1.00  6.48    22.   0.
  32.00  1.54  1.54       91.        73.       164.     0.95     0.75     1.70
   0.177    0.140    0.317       0.852       0.006         0.164         0.045
  WUMSWITCOLU1331392020110 01              BB2: 4.1 0.46  1.00  2.62    56.   0.
  32.00  1.54  1.54      195.       155.       349.     2.02     1.61     3.63
   0.466    0.370    0.836       1.816       0.005         0.338         0.092
  WUMSWITOLBU1311161020710 01              SB2: 6.5 0.78  1.00  6.48    14.   0.
  32.00  1.54  1.54       58.        46.       104.     0.60     0.48     1.08
   0.235    0.187    0.422       0.542       0.004         0.105         0.029
  WUMSWITOLBU1312162020210 01              SD2: 6.7 0.35  1.40  6.30    24.   0.
  32.00  1.54  1.54      100.        79.       179.     1.37     1.09     2.47
   0.244    0.194    0.438       1.726       0.008         0.238         0.065
```

```
  WUMSWITSCSU1242162020110 01                SB2: 6.5 0.30  0.71  6.29  1200.   0.
  17.40  1.54  1.54     2994.      1992.      4986.    32.36    21.53    53.88
   4.853    3.229    8.082      19.182       0.169          5.198          1.418
  WUMSWITSCSU1341162020110 01                SB2: 6.5 0.31  0.68  6.29   525.   0.
  22.40  1.54  1.54     2179.      1730.      3909.    22.29    17.71    40.00
   3.511    2.789    6.300      13.520       0.126          3.859          1.052
  WUMSWITSCSU1341162020210 01                SB2: 6.5 0.30  1.00  6.09   525.   0.
  26.40  1.54  1.54     2179.      1450.      3628.    22.40    14.90    37.30
   3.360    2.235    5.596      18.652       0.114          3.599          0.982
  WUMSWITSCSU1341162020510 01                SB2: 6.5 0.20  0.65  1.75   334.   0.
  22.40  1.54  1.54     1386.      1101.      2487.    14.12    11.21    25.33
   1.426    1.132    2.558       8.282       0.022          2.443          0.666
  WUMSWITSCSU1342162020110 01                SB2: 6.5 0.23  0.65  6.29   402.   0.
  17.40  1.54  1.54     1668.      1325.      2993.    17.72    14.07    31.79
   2.064    1.639    3.704      10.332       0.100          3.067          0.836
  WUMSWITSDBU1241162020110 01                BB2: 4.1 0.31  0.78  2.62  1135.   0.
  32.00  1.54  1.54     3459.      2747.      6205.    30.77    24.44    55.22
   4.770    3.788    8.558      21.534       0.072          5.142          1.402
  WUMSWITSDSU1331392020110 01                SB1: 4.5 0.20  1.00  4.41    87.   0.
  32.00  1.54  1.54      302.       213.       516.     3.14     2.21     5.35
   0.319    0.225    0.543       2.677       0.012          0.516          0.141
  WUMSWITSDSU1332392020110 01                SB1: 4.5 0.43  0.78  4.41   183.   0.
  32.00  1.54  1.54      488.       388.       876.     5.84     4.64    10.48
   1.250    0.993    2.243       4.093       0.023          1.011          0.276
  WUMSWITSDSU1341392010210 01                SB1: 4.5 0.41  0.68  4.55   113.   0.
  32.00  1.54  1.54      393.       239.       632.     4.09     2.49     6.58
   0.832    0.507    1.338       2.243       0.015          0.635          0.173
  WUMSWITSDSU1342392010210 01                SB1: 4.5 0.41  0.70  4.55   113.   0.
  32.00  1.54  1.54      301.       239.       541.     3.24     2.57     5.81
   0.659    0.523    1.183       2.034       0.013          0.561          0.153
  WUMSWITSGBU1231392020110 01                BB2: 4.1 0.34  1.00  2.62   166.   0.
  32.00  1.54  1.54      577.       352.       929.     5.96     3.63     9.59
   1.016    0.619    1.634       4.793       0.013          0.893          0.243
  WUMSWITSGBU1232392020310 01                BB2: 4.1 0.47  1.00  0.45   280.   0.
  26.40  1.54  1.54      747.       593.      1340.     8.74     6.94    15.68
   2.049    1.627    3.676       7.838       0.004          1.460          0.398
  WUMSWITSHBU1332162010110 01                SB2: 6.5 0.43  1.00  6.29   235.   0.
  32.00  1.54  1.54      717.       498.      1215.     8.51     5.91    14.41
   1.842    1.279    3.121       7.207       0.045          1.391          0.379
  WUMSWITSHBU1332162020110 01                SB2: 6.5 0.36  1.00  6.29    98.   0.
  32.00  1.54  1.54      341.       208.       548.     4.13     2.51     6.64
   0.736    0.449    1.185       3.320       0.021          0.641          0.175
  WUMS  TSHSU0432392020210 01                SB1: 4.5 0.32  1.00  4.28   258.   0.
  22.40  1.54  1.54      688.       547.      1235.     7.91     6.29    14.20
   1.278    1.015    2.293       7.100       0.030          1.370          0.374
  WUMS  TSJBU0431392020110 01                BB2: 4.1 0.41  1.00  2.62   177.   0.
  26.40  1.54  1.54      615.       489.      1104.     6.50     5.17    11.67
   1.333    1.059    2.392       5.835       0.015          1.087          0.296
  WUMS  TSJBU0431392020310 01                BB2: 4.1 0.40  1.00  0.45    37.   0.
  32.00  1.54  1.54      129.       102.       231.     1.34     1.06     2.40
   0.265    0.210    0.475       1.200       0.001          0.224          0.061
  WUMS  TSJBU0432392020310 01                BB2: 4.1 0.40  1.00  0.45   116.   0.
  32.00  1.54  1.54      403.       320.       724.     4.29     3.41     7.71
   0.850    0.675    1.526       3.853       0.002          0.718          0.196
  WUMS  TSKBU0411391020710 01                BB2: 4.1 0.85  1.00  4.10    47.   0.
  29.50  1.54  1.54      195.       155.       350.     2.03     1.61     3.64
   0.865    0.687    1.552       1.820       0.007          0.339          0.092
  WUMSWITSLBU1341392020110 01                BB2: 4.1 0.42  0.48  2.62   144.   0.
  32.00  1.54  1.54      598.       475.      1072.     6.08     4.83    10.91
   1.274    1.012    2.286       2.619       0.014          1.016          0.277
Oil/Gas Steam                    5
Oil/Gas Steam_Nox                6
Nuclear                          7
  WUMS  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   512.   0.
 195.70  0.98  0.98     2408.      1564.      3972.    25.04    16.27    41.31
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  WUMS  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   514.   0.
 195.70  0.98  0.98     2332.      1655.      3987.    24.50    17.39    41.89
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  WUMS  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   498.   0.
 163.50  0.83  0.83     1837.      1794.      3631.    20.21    19.74    39.95
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  WUMS  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   354.   0.
  15.40  0.00  0.00     1007.       676.      1683.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  WUMSWICC   1322   000000 00              GAS      0.12  0.00  0.00   307.   0.
  13.90  1.03  1.03      619.       445.      1064.     5.26     3.78     9.04
   0.316    0.227    0.542       0.000       0.000         0.480         0.131
IGCC                           10
Turbine                        11
  WUMS  CT   0413   000000 00              GAS      0.10  0.00  0.00    23.   0.
   7.80  0.00  1.03        0.         4.         4.     0.00     0.05     0.05
   0.000    0.002    0.002       0.000       0.000         0.003         0.001
  WUMSWICT   1223   000000 00              GAS      0.10  0.00  0.00   212.   0.
   7.80  0.00  1.03        0.        32.        32.     0.00     0.42     0.42
   0.000    0.021    0.021       0.000       0.000         0.022         0.006
  WUMSWICT   1312   000000 00              GAS      0.08  0.00  0.00    18.   0.
   3.00  1.03  1.03       12.         9.        22.     0.14     0.10     0.24
   0.006    0.004    0.010       0.000       0.000         0.013         0.003
  WUMSWICT   1322   000000 00              GAS      0.08  0.00  0.00  1221.   0.
   2.80  1.03  1.03      320.       333.       653.     3.50     3.64     7.14
   0.140    0.145    0.285       0.000       0.000         0.379         0.103
  WUMS  CT   8     (a)                     GAS      0.08  0.00  0.00   266.  55.
   9.80  0.00  3.91        0.        45.        45.     0.00     0.49     0.49
   0.000    0.020    0.020       0.000       0.000         0.026         0.007
  WUMS  ACT  8     (b)                     GAS      0.10  0.00  0.00   959.  53.
   7.80  2.94  2.94     1167.       487.      1654.     9.98     4.16    14.14
   0.499    0.208    0.707       0.000       0.000         0.750         0.205
Biomass                        12
  WUMS  BIOMS00  45 000000 00              B1-: 0.6 0.02  0.08  0.57    12.   0.
  44.80  5.36  5.36       52.        40.        92.     0.42     0.32     0.74
   0.004    0.003    0.007       0.030       0.000         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  WUMS  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    14.   0.
  78.60 10.48 10.48       63.        48.       110.     0.85     0.65     1.51
   0.105    0.080    0.185       0.000       0.000         0.000         0.000
  WUMS  LG   0     (a)                     WASTE    0.25  0.00  0.00    23. 176.
  78.60 10.48 10.48       99.        71.       170.     0.99     0.71     1.70
   0.121    0.088    0.209       0.000       0.000         0.000         0.000
Wind                           15
  WUMS  WIND 00     000000 00              NONE     0.00  0.00 71.00    13.   0.
  26.40  0.00  0.00       20.        11.        32.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
Cgn_Coal                       22
  WUMSWICGCOU1211162050710 01              SB2: 6.5 0.37  1.00  6.48    11.   0.
  11.70  1.54  1.54       45.        36.        80.     0.36     0.29     0.65
   0.066    0.054    0.120       0.323       0.002         0.062         0.017
  WUMSWICGCOU1311162050710 01              SB2: 6.5 0.37  1.00  6.48     4.   0.
  32.00  1.54  1.54       16.        13.        29.     0.15     0.12     0.27
   0.028    0.023    0.051       0.136       0.001         0.026         0.007
Cgn_Gas                        23
```

```
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  WUMSWITSCSU1242162020110 01     SCR1     SB2: 6.5 0.05  0.71  6.29   479.   7.
  17.80  2.41  2.41     1986.      1577.      3563.    21.46    17.04    38.50
   0.537    0.426    0.963      13.707       0.121         3.715         1.013
  WUMSWITSCSU1341161010110 01     SCR2     SB2: 6.5 0.05  1.00  6.29   342.   9.
  26.90  2.47  2.47     1419.      1127.      2547.    13.65    10.84    24.50
   0.341    0.271    0.612      12.248       0.077         2.363         0.645
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
  WUMSWITCOLS1231391020104 01     HNO1     BD1: 5.1 0.52  0.57  3.24    80.   3.
  43.30  3.86  3.86      213.       169.       383.     2.22     1.76     3.98
   0.577    0.458    1.035       1.135       0.006         0.371         0.101
Ret.SCR+Scrb                   44
  WUMSWITSDBU1241162020110 01     RL02     SD2: 6.7 0.05  0.06  2.28   295.  37.
  43.99  3.41  3.41     1226.       973.      2199.    11.13     8.84    19.98
   0.278    0.221    0.499       0.559       0.023         1.927         0.526
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: MANO     (Emissions By Plant)
-------------------------------------------------
```

	NOx	SO2	MER	CO2	Carbon
	Generation			Trillion	
	Emission	Emission	Emission	Emission	Emission
				(lb/MBtu)	(lb/TBtu)	(MW)	$
/KWyr	VOM Mill/KWh	(GWh)		(Btu)			
	(1000 Tons)	(1000 Tons)	(Tons)	(Mil Tonnes)	(Mil Tonnes)		
Unit			Fuel	NOx	SO2 MERCURY	Cap.	Cap
.	FO&M WINT. SUMM.	WINTER	SUMMER	Total	WINTER	SUMMER	Total
	WINTER SUMMER	Total	Total	Total	Total		Total
Scrubbed Coal_NOx			1				
MANO	TCOLA0411182020105 01			BG1: 8.0	0.01	0.25	0.80	18.	0.
23.60	3.91 3.91	75.	59.	134.	0.67	0.53	1.21
0.004	0.003 0.007	0.151	0.000	0.112	0.031
MANO	TCOLD0431182050307 01			BG1: 8.0	0.28	0.25	0.24	42.	0.
23.30	3.85 3.85	174.	138.	313.	1.81	1.44	3.25
0.253	0.201 0.454	0.407	0.000	0.303	0.083
Scrubbed Coal			2				
MANO	TOLBS0432191010103 01			BG1: 8.0	0.51	0.25	3.70	86.	0.
42.70	2.94 2.94	357.	283.	640.	3.98	3.16	7.15
1.016	0.807 1.822	0.893	0.013	0.666	0.182
MANO	TOLBS0432192010203 01			BG1: 8.0	0.47	0.25	4.66	88.	0.
42.70	2.94 2.94	365.	290.	655.	4.08	3.24	7.33
0.953	0.757 1.711	0.916	0.017	0.682	0.186
MANOILTSGBS0412191020703 01				BG1: 8.0	0.97	5.04	4.66	22.	0.
43.00	2.94 2.94	91.	73.	164.	1.08	0.86	1.93
0.522	0.415 0.937	4.871	0.005	0.180	0.049
MANO	TSXBS0441192020103 01			BG1: 8.0	0.34	0.25	2.73	190.	0.
40.60	2.94 2.94	789.	626.	1415.	8.32	6.61	14.93
1.398	1.111 2.509	1.867	0.020	1.391	0.379
Unscrubbed Coal_NOx			3				
MANO	TSCSO0441182010102 01			SB2: 6.5	0.30	0.68	6.29	292.	0.
32.30	1.54 1.54	1015.	619.	1634.	9.91	6.04	15.95
1.462	0.891 2.353	5.424	0.050	1.539	0.420
Unscrubbed Coal			4				
MANO	TCOLU0442192020110 01			BE1: 6.1	0.22	2.20	3.89	102.	0.
32.00	1.54 1.54	190.	216.	406.	2.14	2.44	4.58
0.234	0.267 0.501	5.036	0.009	0.426	0.116
MANOMOTCOLU0511282050710 01				SD2: 6.7	0.48	1.40	6.70	17.	0.
32.00	1.54 1.54	71.	56.	127.	0.73	0.58	1.32
0.175	0.139 0.315	0.922	0.004	0.127	0.035
MANOMOTOLBU0532281010110 01				BB2: 4.1	0.62	1.00	2.62	49.	0.
32.00	1.54 1.54	170.	104.	274.	1.86	1.14	3.00
0.575	0.350 0.926	1.500	0.004	0.279	0.076
MANOMOTSABU0541252020110 01				SB2: 6.5	0.22	1.00	6.29	1158.	0.
26.40	1.54 1.54	4026.	2453.	6479.	41.03	25.01	66.04
4.472	2.726 7.198	33.018	0.208	6.371	1.738
MANO	TSASU0441202020110 01			SB2: 6.5	0.29	0.68	6.29	169.	0.
32.00	1.54 1.54	588.	358.	946.	6.16	3.75	9.91
0.886	0.540 1.427	3.368	0.031	0.956	0.261
MANO	TSBSU0432172010110 01			SB1: 4.5	0.37	0.69	4.41	100.	0.
32.00	1.54 1.54	267.	212.	479.	3.07	2.44	5.50
0.569	0.452 1.021	1.893	0.012	0.531	0.145

```
  MANO  TSBSU0441172020110 01                SB1: 4.5 0.31  0.72  4.41  2672.   0.
  32.00  1.54  1.54     9727.      7378.     17104.    94.01    71.30   165.31
  14.665   11.123   25.789      59.760       0.365        15.949          4.350
  MANO  TSBSU0441172020210 01                SB1: 4.5 0.30  0.69  4.28   579.   0.
  32.00  1.54  1.54     2403.      1599.      4002.    23.11    15.38    38.49
   3.501    2.329    5.831      13.336       0.082         3.713          1.013
  MANO  TSCSU0441182010110 01                SB2: 6.5 0.46  0.63  6.29   999.   0.
  28.10  1.54  1.54     3450.      2117.      5567.    35.18    21.58    56.77
   8.145    4.996   13.141      17.938       0.178         5.477          1.494
  MANO  TSCSU0441202020110 01                SB2: 6.5 0.27  0.68  6.29   676.   0.
  32.00  1.54  1.54     2350.      1432.      3782.    24.07    14.67    38.75
   3.214    1.959    5.173      13.174       0.122         3.738          1.020
  MANO  TSCSU0442182010110 01                SB2: 6.5 0.47  0.63  6.29   700.   0.
  26.40  1.54  1.54     1867.      1483.      3350.    20.39    16.20    36.59
   4.823    3.830    8.653      11.561       0.115         3.530          0.963
  MANO  TSCSU0442202020110 01                SB2: 6.5 0.27  0.68  6.29   169.   0.
  32.00  1.54  1.54      451.       358.       809.     4.80     3.81     8.61
   0.648    0.514    1.162       2.927       0.027         0.831          0.227
  MANOMOTSDBU0541252020110 01                BB2: 4.1 0.20  1.00  2.62  2300.   0.
  26.40  1.54  1.54     8617.      6350.     14968.    88.74    65.40   154.14
   9.051    6.670   15.722      77.068       0.202        14.354          3.915
  MANO  TSESU0441172010110 01                SB1: 4.5 0.42  0.76  4.41   303.   0.
  32.00  1.54  1.54     1053.       837.      1890.     9.82     7.80    17.62
   2.048    1.626    3.674       6.687       0.039         1.700          0.464
  MANO  TSESU0441172020310 01                SB2: 6.5 0.32  0.68  1.75   187.   0.
  32.00  1.54  1.54      776.       616.      1392.     7.32     5.81    13.14
   1.175    0.933    2.108       4.440       0.011         1.267          0.346
  MANOMOTSGBU0511271040310 01                BB2: 4.1 0.52  1.00  0.45    14.   0.
  32.00  1.54  1.54       58.        46.       104.     0.58     0.46     1.05
   0.153    0.121    0.274       0.523       0.000         0.097          0.027
  MANOMOTSGBU0511272020710 01                BB2: 4.1 0.27  1.00  4.10     2.   0.
  32.00  1.54  1.54        8.         7.        15.     0.08     0.07     0.15
   0.011    0.009    0.020       0.075       0.000         0.014          0.004
  MANOMOTSGBU0531272040310 01                BB2: 4.1 0.49  1.00  0.45    57.   0.
  32.00  1.54  1.54      198.       157.       356.     1.99     1.58     3.57
   0.487    0.387    0.873       1.786       0.001         0.333          0.091
  MANO  TSJBU0432252020210 01                BB2: 4.1 0.38  1.00  3.69    96.   0.
  32.00  1.54  1.54      334.       203.       537.     3.58     2.18     5.76
   0.671    0.409    1.079       2.878       0.011         0.536          0.146
  MANO  TSJBU0441252020110 01                BB2: 4.1 0.35  1.00  2.62   372.   0.
  32.00  1.54  1.54     1293.      1027.      2320.    12.91    10.25    23.16
   2.291    1.820    4.111      11.581       0.030         2.157          0.588
  MANO  TSJBU0441252020210 01                BB2: 4.1 0.30  1.00  3.69   428.   0.
  22.40  1.54  1.54     1488.       907.      2395.    15.69     9.56    25.25
   2.353    1.434    3.787      12.625       0.047         2.351          0.641
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  MANO  NUKE 00    8000000 00                NUC      0.00  0.00  0.00  1072.   0.
 184.60  1.32  1.32     4576.      3932.      8508.    45.89    39.44    85.33
   0.000    0.000    0.000       0.000       0.000         0.000          0.000
  MANO  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1182.   0.
  91.60  0.51  0.51     5678.      4336.     10014.    58.45    44.64   103.09
   0.000    0.000    0.000       0.000       0.000         0.000          0.000
  MANO  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1175.   0.
  91.60  0.51  0.51     5619.      4310.      9929.    57.84    44.37   102.22
   0.000    0.000    0.000       0.000       0.000         0.000          0.000
  MANO  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1255.   0.
  88.40  0.50  0.50     6027.      4240.     10267.    62.68    44.09   106.77
   0.000    0.000    0.000       0.000       0.000         0.000          0.000
  MANO  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1222.   0.
  88.40  0.50  0.50     5908.      4231.     10139.    60.21    43.12   103.33
   0.000    0.000    0.000       0.000       0.000         0.000          0.000
  MANO  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1128.   0.
 112.50  0.78  0.78     5556.      4088.      9644.    58.81    43.27   102.08
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1131.   0.
 112.50  0.78  0.78     5173.      4145.      9318.    55.44    44.41    99.85
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1154.   0.
  87.60  0.57  0.57     5407.      3869.      9276.    56.56    40.47    97.03
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   850.   0.
 196.50  0.86  0.86     4215.      3034.      7249.    46.96    33.79    80.75
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   855.   0.
 188.00  0.94  0.94     4066.      3136.      7203.    44.51    34.33    78.84
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   855.   0.
 188.00  0.94  0.94     3846.      3033.      6878.    42.17    33.26    75.44
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   850.   0.
 196.50  0.86  0.86     4163.      2525.      6688.    46.26    28.06    74.32
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                                 8
  MANO  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   362.   0.
  15.50  0.00  0.00     1079.       747.      1826.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                        9
  MANO  CC   0422   000000 00              GAS      0.02  0.00  0.00  3078.   0.
  13.90  1.03  1.03     2069.      1585.      3654.    15.52    11.89    27.40
   0.155    0.119    0.274       0.000       0.000         1.454         0.397
  MANOMOCC   0522   000000 00              GAS      0.02  0.00  0.00   260.   0.
  13.90  1.03  1.03      175.       134.       309.     1.31     1.00     2.31
   0.013    0.010    0.023       0.000       0.000         0.123         0.034
IGCC                                 10
Turbine                              11
  MANO  CT   0411   000000 00              GAS      0.10  0.00  0.00     3.   0.
  11.20  1.03  1.03        1.         2.         2.     0.01     0.01     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  MANO  CT   0412   000000 00              GAS      0.09  0.00  0.00   191.   0.
   3.50  0.00  1.03        0.        33.        33.     0.00     0.35     0.35
   0.000    0.016    0.016       0.000       0.000         0.019         0.005
  MANO  CT   0422   000000 00              GAS      0.08  0.00  0.00  9496.   0.
   2.90  0.00  1.03        0.       969.       969.     0.00    10.59    10.59
   0.000    0.434    0.434       0.000       0.000         0.562         0.153
  MANOMOCT   0512   000000 00              GAS      0.10  0.00  0.00    37.   0.
   4.00  0.00  1.03        0.         6.         6.     0.00     0.07     0.07
   0.000    0.003    0.003       0.000       0.000         0.003         0.001
Biomass                              12
  MANO  BIOMS00  45 000000 00              B1-: 0.6 0.02  0.08  0.57     1.   0.
  44.80  5.36  5.36        4.         3.         8.     0.03     0.03     0.06
   0.000    0.000    0.001       0.002       0.000         0.000         0.000
Geothermal                           13
Landfill Gas                         14
  MANO  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    38.   0.
  78.60 10.48 10.48      170.       130.       300.     2.32     1.77     4.09
   0.285    0.218    0.503       0.000       0.000         0.000         0.000
Wind                                 15
  MANO  WIND 00     000000 00              NONE     0.00  0.00 71.00    52.   0.
  26.40  0.00  0.00       88.        49.       137.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                            16
Solar                                17
Non Fossil_Other                     18
  MANO  OTHER00     000000 00              NONE     0.00  0.00  0.00    21.   0.
 103.60  0.00  0.00       93.        73.       166.     1.02     0.80     1.82
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                         19
  MANO  WASTE041    000000 00              WASTE    0.42  0.00  0.00     2.   0.
```

```
 103.60  0.00  0.00        9.         7.        16.     0.10     0.08     0.17
   0.020    0.016    0.036       0.000       0.000         0.000         0.000
Pump Storage                    20
  MANO  PUMPS00     000000 00              NONE     0.00  0.00 71.00   350.   0.
   6.50  0.00  0.00       72.       142.       214.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                    21
Cgn_Coal                        22
Cgn_Gas                         23
  MANO  CGCT 0412   000000 00              GAS      0.10  0.00  0.00     8.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  MANO  CGCC 0412   000000 00              GAS      0.02  0.00  0.00     7.   0.
  13.90  1.03  1.03        5.         4.         8.     0.04     0.03     0.06
   0.000    0.000    0.001       0.000       0.000         0.003         0.001
  MANO  CGCC 0413   000000 00              GAS      0.10  0.00  0.00     1.   0.
  14.90  1.03  1.03        0.         1.         1.     0.00     0.00     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  CGCC 0422   000000 00              GAS      0.02  0.00  0.00    40.   0.
  13.90  1.03  1.03       27.        21.        47.     0.20     0.15     0.36
   0.002    0.002    0.004       0.000       0.000         0.019         0.005
Cgn_Oil                         24
Cgn_Other                       25
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
  MANO  TSABU0441182020110 01     LO01     BG1: 8.0 0.31  0.25  2.73   543.  22.
  25.77  2.89  2.89     2255.      1791.      4046.    21.58    17.14    38.72
   3.388    2.691    6.078       4.839       0.053         3.605         0.983
  MANOILTSHBU0441192020110 01     LO01     BG1: 8.0 0.39  0.25  2.73   421.  38.
  44.99  2.89  2.89     1747.      1388.      3135.    16.60    13.18    29.78
   3.228    2.564    5.792       3.722       0.041         2.773         0.756
  MANO  TSXBU0441192020110 01     LO01     BG1: 8.0 0.29  0.25  2.73   227.  30.
  38.09  2.93  2.93      943.       749.      1692.     9.34     7.42    16.75
   1.368    1.087    2.455       2.094       0.023         1.560         0.426
  MANO  TSXBU0441192020110 01     ML02     BF1: 6.8 0.29  0.12  2.32   431.  28.
  38.19  2.52  2.52     1787.      1420.      3207.    17.70    14.06    31.76
   2.593    2.060    4.653       1.906       0.037         2.958         0.807
Ret.ExistSCR & Scrub            38
  MANO  TSEBC0441181010101 01     LO01     BG1: 8.0 0.07  0.25  0.80   542.  23.
  35.68  3.95  3.95     2251.      1788.      4039.    23.53    18.69    42.22
   0.859    0.682    1.541       5.277       0.017         3.931         1.072
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
  MANOILTSBBU0441181010110 01     SCR2     BB2: 4.1 0.06  1.00  2.62   298.   8.
  28.90  2.44  2.44     1036.       823.      1859.    10.24     8.13    18.36
   0.317    0.252    0.569       9.182       0.024         1.710         0.466
  MANOMOTSFBU0542251010110 01     SCR2     BB2: 4.1 0.08  1.00  2.62   952.   8.
  29.60  2.44  2.44     3310.      2439.      5749.    35.78    26.37    62.16
   1.378    1.015    2.393      31.079       0.082         5.788         1.579
Ret.ExistScrub & SCR            41
  MANO  TSXBS0441191020103 01     SCR2     BF1: 6.8 0.06  0.50  0.68   366.   8.
  43.20  3.86  3.86     1519.      1206.      2725.    15.22    12.09    27.30
   0.479    0.381    0.860       6.880       0.009         2.543         0.693
  MANO  TSYBS0441191010103 01     SCR2     BF1: 6.8 0.06  0.60  0.68   170.  11.
  41.20  3.96  3.96      706.       560.      1266.     7.41     5.88    13.29
```

```
   0.215    0.171    0.385       3.988       0.005         1.238         0.338
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  MANOILTSDBU0441191020110 01     SL02     BE1: 6.1 0.06  0.09  0.61   353.  35.
  37.37  3.44  3.44     1467.      1165.      2632.    14.45    11.47    25.92
   0.455    0.361    0.816       1.140       0.008         2.414         0.658
  MANOILTSDBU0441192020110 01     RL01     BE1: 6.1 0.05  0.09  0.61   257.  34.
  37.77  3.50  3.50     1065.       845.      1910.    10.84     8.61    19.45
   0.271    0.215    0.486       0.856       0.006         1.811         0.494
  MANO  TSEBU0442181010110 01     SO01     BG1: 8.0 0.07  0.25  0.80   542.  31.
  41.29  3.90  3.90     2251.      1788.      4039.    24.50    19.46    43.95
   0.894    0.710    1.604       5.494       0.018         4.093         1.116
  MANO  TSKBU0441182020110 01     RO01     BG1: 8.0 0.05  0.25  0.80   583.  29.
  35.17  3.75  3.75     2418.      1920.      4338.    22.79    18.10    40.90
   0.570    0.453    1.022       5.112       0.016         3.809         1.039
  MANOILTSBBU0441181010110 01     SCR2ML02 BE1: 6.1 0.06  0.09  0.61     2.  33.
  38.62  3.43  3.43       10.         8.         18.     0.10     0.08     0.18
   0.003    0.002    0.006       0.008       0.000         0.017         0.005
  MANOILTSBBU0441181010110 01     ML02SCR2 BE1: 6.1 0.06  0.09  0.61   587.  33.
  38.61  3.43  3.43     2436.      1934.      4370.    24.56    19.51    44.07
   0.761    0.605    1.366       1.939       0.013         4.104         1.119
  MANO  TSKBU0441181010110 01     LO01SCR2 BG1: 8.0 0.08  0.25  0.80  1132.  30.
  35.37  3.85  3.85     4697.      3730.      8427.    48.51    38.53    87.05
   1.989    1.580    3.569      10.881       0.035         8.106         2.211
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
```

Year: 2010, Region: MAPP (Emissions By Plant)

	NOx	SO2	MER	CO2	Carbon
	Generation			Trillion	
	Emission	Emission	Emission	Emission	Emission
				(lb/MBtu)	(lb/TBtu)	(MW)	$
/KWyr	VOM Mill/KWh	(GWh)		(Btu)			
	(1000 Tons)	(1000 Tons)	(Tons)	(Mil Tonnes)	(Mil Tonnes)		
Unit			Fuel	NOx	SO2 MERCURY	Cap.	Cap
. FO&M	WINT. SUMM.	WINTER	SUMMER	Total	WINTER	SUMMER	Total	
WINTER	SUMMER	Total	Total	Total	Total	Total	Total	
Scrubbed Coal_NOx			1					
Scrubbed Coal			2					
MAPP TCOLS1111252020203 01				BE1: 6.1	0.46	0.52	3.53	76.	0.
43.00	2.94	2.94	315.	251.	566.	3.28	2.61	5.89	
0.754	0.599	1.354	1.534	0.010	0.548	0.149			
MAPP TSWLS0732312030103 02				LF2: 9.8	0.35	0.60	6.07	74.	0.
43.00	2.94	2.94	257.	157.	414.	3.42	2.09	5.51	
0.596	0.363	0.959	1.654	0.017	0.538	0.147			
MAPP TSEBS1142252020103 01				BE1: 6.1	0.32	0.67	2.07	217.	0.
43.00	2.94	2.94	754.	460.	1214.	8.05	4.91	12.96	
1.304	0.795	2.099	4.319	0.013	1.207	0.329			
MAPP TSISS1141262020703 01				SB1: 4.5	0.30	0.46	3.18	350.	0.
42.70	2.94	2.94	1217.	966.	2183.	12.88	10.23	23.11	
1.932	1.534	3.466	5.280	0.037	2.229	0.608			
MAPP TSXBS1142272020103 01				BE1: 6.1	0.30	0.13	2.07	161.	0.
35.60	2.94	2.94	668.	445.	1113.	7.20	4.79	11.98	
1.080	0.718	1.798	0.804	0.012	1.116	0.304			
MAPPNDTSXLS0732312020304 02				LF2: 9.8	0.40	0.58	9.79	69.	0.
35.60	2.94	2.94	286.	227.	514.	3.11	2.47	5.57	
0.621	0.494	1.115	1.617	0.027	0.545	0.149			
MAPPNDTSXLS0741311020103 02				LF2: 9.8	0.40	1.15	5.48	604.	0.
40.60	2.94	2.94	2507.	1668.	4174.	26.07	17.34	43.41	
5.214	3.469	8.683	24.928	0.119	4.242	1.157			
MAPPNDTSXLS0742311010103 02				LF2: 9.8	0.86	0.52	5.68	420.	0.
42.70	2.94	2.94	1743.	1384.	3127.	20.22	16.06	36.28	
8.694	6.905	15.600	9.521	0.103	3.545	0.967			
MAPPNDTSXLS0742312010304 02				LF2: 9.8	0.86	0.70	8.91	421.	0.
35.60	2.94	2.94	1747.	1162.	2910.	19.86	13.21	33.08	
8.541	5.682	14.223	11.607	0.147	3.232	0.881			
MAPPNDTSXLS0742312020304 02				LF2: 9.8	0.32	0.28	9.79	900.	0.
35.60	2.94	2.94	3735.	2967.	6702.	40.90	32.48	73.38	
6.502	5.164	11.667	10.427	0.359	7.169	1.955			
MAPP TSYSS1141262020304 01				SD1: 4.4	0.33	0.20	3.30	871.	0.
35.60	2.94	2.94	3615.	2871.	6486.	35.96	28.56	64.51	
5.951	4.726	10.677	6.593	0.106	6.224	1.698			
MAPP TSYSS1142262020203 01				SD1: 4.4	0.29	0.10	3.52	535.	0.
40.60	2.94	2.94	2220.	1477.	3697.	24.03	15.99	40.02	
3.461	2.302	5.763	2.073	0.070	3.861	1.053			
MAPP TSYSS1142262020703 01				SE1: 5.5	0.24	0.17	3.87	1424.	0.
42.70	2.94	2.94	1259.	658.	1917.	13.42	7.02	20.43	
1.623	0.849	2.472	1.759	0.040	1.971	0.538			
MAPP TSYSS1142262020703 01				SD1: 4.4	0.24	0.11	3.08	1424.	0.
42.70	2.94	2.94	4651.	3816.	8467.	49.58	40.67	90.25	
5.999	4.922	10.920	5.180	0.139	8.707	2.375			
MAPPWYTSZLS0841322020103 01				SE1: 5.5	0.35	0.05	4.65	550.	0.
40.60	2.94	2.94	2283.	1813.	4095.	23.92	19.00	42.92	
4.187	3.325	7.512	1.037	0.100	4.141	1.129			
MAPP TSASS0732312020703 01				SB1: 4.5	0.40	0.24	3.18	44.	0.
43.00	2.94	2.94	183.	145.	328.	2.36	1.87	4.23	
0.472	0.375	0.847	0.512	0.007	0.408	0.111			
Unscrubbed Coal_NOx			3					

```
  MAPP  TCOLU0711312050710 01                SB2: 6.5 0.47  1.00  6.48    20.   0.
  25.80  1.54  1.54        83.        66.       149.     0.86     0.69     1.55
   0.203    0.161    0.364       0.774       0.005         0.149         0.041
  MAPP  TCOLU0731311040110 01                SB1: 4.5 0.60  1.00  4.41    28.   0.
  32.00  1.54  1.54       116.        92.       208.     1.21     0.96     2.17
   0.363    0.288    0.651       1.084       0.005         0.209         0.057
  MAPP  TCOLU1111261040110 01                BB2: 4.1 0.60  1.00  2.67    14.   0.
  17.40  1.54  1.54        58.        46.       104.     0.60     0.48     1.08
   0.181    0.144    0.325       0.542       0.001         0.101         0.028
  MAPP  TCOLU1111271040210 01                BG1: 8.0 0.60  5.00  8.04    19.   0.
  32.00  1.54  1.54        79.        63.       141.     0.82     0.65     1.47
   0.246    0.195    0.441       3.678       0.006         0.137         0.037
  MAPP  TCOLU1111261040310 01                BB2: 4.1 0.60  0.72  0.45     8.   0.
  32.00  1.54  1.54        33.        26.        60.     0.35     0.27     0.62
   0.104    0.082    0.186       0.223       0.000         0.058         0.016
  MAPP  TCOLU1111252020110 01                BG1: 8.0 0.46  5.00  5.15    31.   0.
  32.00  1.54  1.54       129.       102.       231.     1.34     1.06     2.40
   0.308    0.244    0.552       6.002       0.006         0.224         0.061
  MAPP  TCOLU1111262050710 01                BB2: 4.1 0.40  1.00  4.10   103.   0.
  32.00  1.54  1.54       427.       340.       767.     4.45     3.53     7.98
   0.891    0.708    1.599       3.988       0.016         0.743         0.203
  MAPP  TCOLU1131261040110 01                BB2: 4.1 0.60  1.00  2.67    37.   0.
  17.40  1.54  1.54       129.        78.       207.     1.34     0.82     2.15
   0.401    0.245    0.646       1.077       0.003         0.200         0.055
  MAPP  TCOLU1131262020110 01                BB2: 4.1 0.46  1.00  2.62    47.   0.
  32.00  1.54  1.54       163.       100.       263.     1.70     1.04     2.73
   0.391    0.238    0.629       1.367       0.004         0.255         0.069
  MAPP  TCOLU1131272020110 01                BB2: 4.1 0.46  1.00  2.62    62.   0.
  32.00  1.54  1.54       216.       131.       347.     2.24     1.37     3.61
   0.516    0.314    0.830       1.804       0.005         0.336         0.092
  MAPP  TCOLU1131252020210 01                BB2: 4.1 0.46  1.00  3.69    73.   0.
  32.00  1.54  1.54       254.       155.       408.     2.64     1.61     4.25
   0.607    0.370    0.977       2.124       0.008         0.396         0.108
  MAPP  TCOLU1131262020310 01                BB2: 4.1 0.46  1.00  0.45   150.   0.
  32.00  1.54  1.54       521.       414.       936.     5.42     4.31     9.73
   1.247    0.991    2.238       4.865       0.002         0.906         0.247
  MAPPWITCOLU1311161010710 01                SB2: 6.5 0.86  1.00  6.48    24.   0.
  32.00  1.54  1.54       100.        79.       179.     1.04     0.82     1.86
   0.445    0.354    0.799       0.929       0.006         0.179         0.049
  MAPPWITCOLU1311162020110 01                SD2: 6.7 0.46  1.40  6.50    63.   0.
  32.00  1.54  1.54       261.       208.       469.     2.72     2.16     4.88
   0.625    0.497    1.122       3.415       0.016         0.471         0.128
  MAPPWITCOLU1311162040210 01                SB2: 6.5 0.37  1.00  6.48    49.   0.
  32.00  1.54  1.54       203.       162.       365.     2.11     1.68     3.79
   0.393    0.312    0.706       1.897       0.012         0.366         0.100
  MAPP  TOLBU1141252020110 01                BB2: 4.1 0.34  1.00  2.62   130.   0.
  32.00  1.54  1.54       452.       275.       727.     4.74     2.89     7.64
   0.809    0.493    1.302       3.818       0.010         0.711         0.194
  MAPPMOTOLBU0512282020110 01                SD2: 6.7 0.42  1.40  6.50    21.   0.
  32.00  1.54  1.54        87.        69.       156.     0.96     0.76     1.72
   0.203    0.161    0.364       1.206       0.006         0.166         0.045
  MAPPMOTOLBU0532281010110 01                BB2: 4.1 0.54  1.00  2.62    97.   0.
  32.00  1.54  1.54       337.       206.       543.     3.76     2.29     6.05
   1.024    0.624    1.648       3.023       0.008         0.563         0.154
  MAPP  TSABU1141282010210 01                BB1: 3.4 0.44  1.00  3.07   135.   0.
  32.00  1.54  1.54       469.       373.       842.     4.94     3.93     8.87
   1.098    0.872    1.969       4.435       0.014         0.826         0.225
  MAPP  TSABU1142282020110 01                BB2: 4.1 0.32  1.00  2.62   371.   0.
  26.40  1.54  1.54      1540.      1024.      2564.    16.41    10.92    27.32
   2.609    1.736    4.344      13.661       0.036         2.544         0.694
  MAPPWITSASU1331162020110 01                SB2: 6.5 0.41  1.00  6.29    87.   0.
  32.00  1.54  1.54       302.       240.       543.     3.13     2.49     5.62
   0.647    0.514    1.161       2.812       0.018         0.543         0.148
  MAPPWITSASU1332162020110 01                SB2: 6.5 0.41  1.00  6.29    57.   0.
```

32.00 1.54 1.54 198. 121. 319. 2.17 1.32 3.50
0.448 0.273 0.722 1.748 0.011 0.337 0.092
MAPP TSBBU1112271020710 01 BG1: 8.0 0.95 5.00 8.04 23. 0.
32.00 1.54 1.54 95. 76. 171. 1.15 0.92 2.07
0.546 0.434 0.980 5.181 0.008 0.193 0.053
MAPP TSBBU1112272040210 01 BB2: 4.1 0.47 1.00 4.10 36. 0.
32.00 1.54 1.54 149. 119. 268. 1.94 1.54 3.48
0.456 0.363 0.819 1.742 0.007 0.325 0.089
MAPP TSBBU1131262020110 01 BB2: 4.1 0.42 1.00 2.62 29. 0.
26.40 1.54 1.54 120. 80. 200. 1.20 0.80 2.00
0.250 0.167 0.417 0.998 0.003 0.186 0.051
MAPP TSBBU1131262020210 01 BB2: 4.1 0.41 1.00 3.69 60. 0.
26.40 1.54 1.54 209. 127. 336. 2.19 1.33 3.52
0.446 0.272 0.717 1.762 0.007 0.328 0.090
MAPPNETSBBU1432282020210 01 BB1: 3.4 0.22 0.75 3.07 85. 0.
26.40 1.54 1.54 353. 280. 633. 3.96 3.14 7.10
0.438 0.348 0.785 2.657 0.011 0.662 0.180
MAPPNETSBBU1441282010310 01 BB2: 4.1 0.85 0.67 0.45 120. 0.
32.00 1.54 1.54 498. 396. 894. 5.20 4.13 9.33
2.205 1.751 3.955 3.102 0.002 0.869 0.237
MAPPNETSBBU1442282010310 01 BB2: 4.1 0.88 0.67 0.45 105. 0.
26.40 1.54 1.54 436. 346. 782. 4.90 3.89 8.79
2.153 1.710 3.863 2.940 0.002 0.819 0.223
MAPPNETSBSU1432282020110 01 SB2: 6.5 0.40 1.00 6.29 76. 0.
32.00 1.54 1.54 315. 210. 525. 3.70 2.46 6.17
0.741 0.493 1.233 3.083 0.019 0.595 0.162
MAPPNETSBSU1432282020210 01 SB2: 6.5 0.38 0.70 6.09 172. 0.
17.40 1.54 1.54 714. 567. 1281. 7.94 6.31 14.25
1.509 1.198 2.707 4.952 0.043 1.375 0.375
MAPPNETSBSU1441282020110 01 SB2: 6.5 0.46 1.00 6.29 585. 0.
22.40 1.54 1.54 2428. 1928. 4356. 25.11 19.95 45.06
5.776 4.588 10.364 22.530 0.142 4.347 1.186
MAPPNETSBSU1441282020210 01 SB2: 6.5 0.46 0.65 6.09 700. 0.
17.40 1.54 1.54 2905. 2307. 5212. 27.57 21.90 49.47
6.341 5.036 11.377 16.151 0.151 4.772 1.302
MAPPNETSBSU1442282020110 01 SB2: 6.5 0.42 1.00 6.29 569. 0.
29.90 1.54 1.54 2361. 1876. 4237. 26.05 20.69 46.75
5.510 4.376 9.887 23.373 0.147 4.510 1.230
MAPPNETSBSU1442282020510 01 SB2: 6.5 0.46 0.66 1.75 665. 0.
22.40 1.54 1.54 2760. 2192. 4952. 29.81 23.68 53.48
6.856 5.445 12.301 17.543 0.047 5.160 1.407
MAPP TSCBU1131272010110 01 BB2: 4.1 0.39 1.00 2.62 80. 0.
32.00 1.54 1.54 278. 221. 499. 2.79 2.21 5.00
0.539 0.428 0.967 2.500 0.007 0.466 0.127
MAPP TSCBU1131252020110 01 BB2: 4.1 0.44 1.00 2.62 34. 0.
32.00 1.54 1.54 118. 72. 190. 1.23 0.75 1.98
0.272 0.166 0.438 0.989 0.003 0.184 0.050
MAPP TSCSU1141252020110 01 SB2: 6.5 0.37 0.68 6.29 637. 0.
22.40 1.54 1.54 2214. 1350. 3564. 23.25 14.17 37.42
4.255 2.593 6.848 12.686 0.118 3.611 0.985
MAPP TSCSU1141252020210 01 SB2: 6.5 0.30 0.72 6.09 644. 0.
17.40 1.54 1.54 2239. 1464. 3703. 23.39 15.30 38.69
3.450 2.257 5.707 13.966 0.118 3.733 1.018
MAPP TSCSU1142252020210 01 SB2: 6.5 0.30 0.71 6.09 260. 0.
26.40 1.54 1.54 904. 551. 1455. 10.51 6.41 16.92
1.577 0.961 2.537 6.039 0.052 1.632 0.445
MAPPWITSCSU1342162020210 01 SB2: 6.5 0.31 0.66 6.09 377. 0.
22.40 1.54 1.54 1565. 1041. 2606. 17.36 11.55 28.91
2.647 1.761 4.409 9.467 0.088 2.789 0.761
MAPP TSDSU1132252020110 01 SB2: 6.5 0.35 0.43 6.29 30. 0.
26.40 1.54 1.54 104. 64. 168. 1.22 0.74 1.96
0.213 0.130 0.343 0.423 0.006 0.189 0.051
MAPP TSDSU1132252020210 01 SB2: 6.5 0.33 0.66 6.09 88. 0.
32.00 1.54 1.54 306. 186. 492. 3.40 2.07 5.47
0.569 0.347 0.915 1.809 0.017 0.527 0.144

```
  MAPP  TSEBU1141252020110 01              BB2: 4.1 0.30  1.00  2.62   211.   0.
  26.40  1.54  1.54      734.       583.      1316.     7.60     6.04    13.64
   1.133    0.900    2.033       6.821       0.018         1.270         0.346
  MAPP  TSGBU1132271010110 01              BB2: 4.1 0.53  1.00  2.62    76.   0.
  26.40  1.54  1.54      264.       161.       425.     2.87     1.75     4.62
   0.753    0.459    1.213       2.310       0.006         0.430         0.117
  MAPP  TSGBU1132272020110 01              BB2: 4.1 0.45  1.00  2.62    39.   0.
  32.00  1.54  1.54      106.        83.       189.     1.19     0.92     2.11
   0.267    0.208    0.475       1.055       0.003         0.197         0.054
  MAPP  TSGBU1132272020210 01              BB2: 4.1 0.43  1.00  3.69    78.   0.
  29.40  1.54  1.54      208.       115.       323.     2.34     1.29     3.63
   0.500    0.277    0.777       1.815       0.007         0.338         0.092
  MAPP  TSGBU1141272020210 01              BB2: 4.1 0.32  1.00  3.69   142.   0.
  32.00  1.54  1.54      494.       392.       886.     5.03     4.00     9.03
   0.811    0.644    1.454       4.516       0.017         0.841         0.229
  MAPP  TSISU1132262020110 01              SB1: 4.5 0.34  0.53  4.41   242.   0.
  32.00  1.54  1.54      841.       513.      1354.     9.79     5.96    15.75
   1.664    1.014    2.678       4.150       0.035         1.520         0.414
  MAPP  TSISU1132262020310 01              SB1: 4.5 0.30  1.00  1.23   138.   0.
  32.00  1.54  1.54      480.       292.       772.     5.31     3.24     8.55
   0.796    0.485    1.282       4.273       0.005         0.824         0.225
  MAPP  TSISU1142262020110 01              SB1: 4.5 0.38  0.58  4.41   454.   0.
  32.00  1.54  1.54     1578.       962.      2540.    17.43    10.62    28.05
   3.337    2.034    5.371       8.091       0.062         2.706         0.738
  MAPPWITSISU1341392020110 01              SB1: 4.5 0.31  1.00  4.41   377.   0.
  26.40  1.54  1.54     1542.      1041.      2583.    14.00     9.45    23.45
   2.177    1.470    3.647      11.726       0.052         2.263         0.617
  MAPP  TSLBU1112261020710 01              BB2: 4.1 0.81  1.00  4.10    23.   0.
  32.00  1.54  1.54       95.        76.       171.     1.12     0.89     2.00
   0.454    0.361    0.815       1.002       0.004         0.187         0.051
  MAPPNETSLBU1412281020310 01              BB2: 4.1 0.71  0.62  0.45    35.   0.
  32.00  1.54  1.54      145.       115.       261.     1.92     1.52     3.44
   0.676    0.537    1.212       1.061       0.001         0.320         0.087
Oil/Gas Steam                    5
Oil/Gas Steam_Nox                6
Nuclear                          7
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   561.   0.
 176.10  0.82  0.82     2777.      1704.      4481.    30.24    18.55    48.79
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   529.   0.
  95.60  0.59  0.59     2691.      1573.      4265.    28.99    16.95    45.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   597.   0.
 109.60  0.70  0.70     2132.      2190.      4322.    22.28    22.89    45.17
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   530.   0.
 145.60  0.59  0.59     2534.      1592.      4126.    27.23    17.11    44.34
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   476.   0.
 232.50  1.20  1.20     1958.      1746.      3704.    20.84    18.58    39.43
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   758.   0.
 185.20  0.93  0.93     2392.      2586.      4978.    25.65    27.73    53.39
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  MAPP  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  3204.   0.
  15.40  0.00  0.00     5412.      4577.      9989.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  MAPP  CC   0422   000000 00              GAS      0.02  0.00  0.00   537.   0.
  13.90  1.03  1.03      120.       277.       397.     0.90     2.07     2.97
   0.009    0.021    0.030       0.000       0.000         0.158         0.043
  MAPP  CC   1113   000000 00              GAS      0.16  0.00  0.00    43.   0.
  19.70  0.00  1.03        0.         7.         7.     0.00     0.08     0.08
   0.000    0.006    0.006       0.000       0.000         0.004         0.001
```

```
  MAPP  CC   1122   000000 00                GAS      0.05  0.00  0.00   451.   0.
  13.90  1.03  1.03      101.       232.       333.     0.79     1.82     2.62
   0.020    0.047    0.067       0.000       0.000         0.139         0.038
  MAPP  CC   1123   000000 00                GAS      0.11  0.00  0.00    89.   0.
  13.90  0.00  1.03        0.        15.        15.     0.00     0.17     0.17
   0.000    0.009    0.009       0.000       0.000         0.009         0.002
  MAPPNECC   1422   000000 00                GAS      0.02  0.00  0.00   118.   0.
  13.90  1.03  1.03       26.        61.        87.     0.20     0.46     0.65
   0.002    0.005    0.007       0.000       0.000         0.035         0.009
IGCC                           10
Turbine                        11
  MAPP  CT   0712   000000 00                GAS      0.08  0.00  0.00     2.   0.
   2.80  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  CT   0722   000000 00                GAS      0.10  0.00  0.00    30.   0.
   7.80  0.00  1.03        0.         5.         5.     0.00     0.06     0.06
   0.000    0.003    0.003       0.000       0.000         0.003         0.001
  MAPP  CT   1111   000000 00                GAS      0.11  0.00  0.00    64.   0.
  10.70  1.03  1.03       15.        33.        48.     0.13     0.30     0.43
   0.007    0.017    0.024       0.000       0.000         0.023         0.006
  MAPP  CT   1112   000000 00                GAS      0.09  0.00  0.00   273.   0.
   3.80  0.00  1.03        0.        47.        47.     0.00     0.50     0.50
   0.000    0.023    0.023       0.000       0.000         0.027         0.007
  MAPP  CT   1122   000000 00                GAS      0.08  0.00  0.00  1513.   0.
   2.80  0.00  1.03        0.       261.       261.     0.00     2.86     2.86
   0.000    0.116    0.116       0.000       0.000         0.152         0.041
  MAPPNECT   1412   000000 00                GAS      0.10  0.00  0.00    49.   0.
  10.00  0.00  1.03        0.         8.         8.     0.00     0.09     0.09
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  MAPPNECT   1422   000000 00                GAS      0.08  0.00  0.00   629.   0.
   3.20  0.00  1.03        0.       108.       108.     0.00     1.20     1.20
   0.000    0.050    0.050       0.000       0.000         0.064         0.017
  MAPPNECT   1423   000000 00                GAS      0.11  0.00  0.00   496.   0.
  10.50  0.00  1.03        0.        10.        10.     0.00     0.13     0.13
   0.000    0.007    0.007       0.000       0.000         0.007         0.002
  MAPPWICT   1312   000000 00                GAS      0.08  0.00  0.00    25.   0.
   3.60  0.00  1.03        0.         4.         4.     0.00     0.05     0.05
   0.000    0.002    0.002       0.000       0.000         0.002         0.001
  MAPPWICT   1322   000000 00                GAS      0.08  0.00  0.00    82.   0.
   2.80  0.00  1.03        0.        14.        14.     0.00     0.15     0.15
   0.000    0.006    0.006       0.000       0.000         0.008         0.002
Biomass                        12
  MAPP  BIOMS00  46 000000 00                B1-: 0.6 0.02  0.08  0.57   163.   0.
  44.80  5.36  5.36      706.       546.      1252.     5.72     4.42    10.14
   0.057    0.044    0.101       0.405       0.003         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  MAPP  LFGAS00     000000 00                WASTE    0.25  0.00  0.00    11.   0.
  78.60 10.48 10.48       49.        38.        87.     0.67     0.51     1.18
   0.083    0.063    0.146       0.000       0.000         0.000         0.000
Wind                           15
  MAPP  WIND 00     000000 00                NONE     0.00  0.00 71.00   857.   0.
  26.40  0.00  0.00     1443.       809.      2252.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  WIN410     (a)                       NONE     0.00  0.00 71.00    24. 140.
  26.40  0.00  0.00       42.        21.        63.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  MAPP  OTHER00     000000 00                NONE     0.00  0.00 71.00    34.   0.
 103.60  0.00  0.00      150.       118.       268.     1.65     1.30     2.95
   0.000    0.000    0.000       0.000       0.105         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
```

```
Int. Imports                    21
  MAPP  MNIMP00     000000 00              NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00        1.         1.         2.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                        22
  MAPP  CGCOU1111262050210 01            BB2: 4.1 0.40  1.00  4.10    11.   0.
  32.00  1.54  1.54       45.        36.        80.     0.40     0.32     0.73
   0.081    0.065    0.146       0.363       0.001         0.068         0.018
  MAPP  CGCOU1111262050710 01            BB2: 4.1 0.40  1.00  4.10     1.   0.
  32.00  1.54  1.54        4.         3.         7.     0.04     0.03     0.07
   0.008    0.007    0.015       0.037       0.000         0.007         0.002
  MAPP  CGSDU1131251020210 01            BB2: 4.1 0.53  0.42  3.69    65.   0.
  17.40  1.54  1.54      263.       212.       475.     2.34     1.89     4.23
   0.617    0.498    1.115       0.882       0.008         0.394         0.107
Cgn_Gas                         23
  MAPP  CGCT 1112   000000 00            GAS      0.09  0.00  0.00    31.   0.
   2.80  0.00  1.03        0.         5.         5.     0.00     0.06     0.06
   0.000    0.002    0.002       0.000       0.000         0.003         0.001
Cgn_Oil                         24
Cgn_Other                       25
  MAPP  CGOTH00     000000 00              NONE     0.00  0.00 71.00     2.   0.
 103.60  0.00  0.00        9.         7.        15.     0.04     0.03     0.06
   0.000    0.000    0.000       0.000       0.002         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
  MAPPSDTSBLU0742261010110 02     ML02     LF2: 9.8 0.86  0.12  5.68   337.  27.
  36.27  2.64  2.64     1399.      1111.      2509.    16.14    12.82    28.97
   6.942    5.514   12.456       1.680       0.082         2.830         0.772
  MAPPNDTSELU0742312010110 02     ML02     LF2: 9.8 0.86  0.12  5.68   676.  29.
  37.37  2.64  2.64     2803.      2227.      5030.    32.17    25.55    57.72
  13.833   10.987   24.820       3.348       0.164         5.639         1.538
  MAPPNDTSELU0742312020110 02     ML01     LF2: 9.8 0.36  0.12  5.48   370.  32.
  44.69  2.62  2.62     1536.      1220.      2756.    17.08    13.56    30.64
   3.048    2.421    5.469       1.777       0.084         2.993         0.816
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
  MAPP  TSABU1141282020110 01     SCR1     BB2: 4.1 0.05  1.00  2.62   924.   8.
  24.10  2.44  2.44     3835.      3046.      6880.    39.22    31.15    70.37
   0.980    0.779    1.759      35.183       0.092         6.553         1.787
  MAPP  TSCSU1141251020210 01     SCR2     SB2: 6.5 0.06  0.73  5.83   714.   7.
  17.80  2.40  2.40     2963.      1971.      4935.    30.95    20.59    51.54
   0.851    0.566    1.417      18.785       0.150         4.972         1.356
  MAPP  TSESU1141261010110 01     SCR2     SB1: 4.5 0.07  1.00  4.41   567.   7.
  26.80  2.42  2.42     2353.      1566.      3919.    22.92    15.25    38.16
   0.779    0.518    1.298      19.082       0.084         3.682         1.004
  MAPP  TSKSU1141261010110 01     SCR2     SB1: 4.5 0.06  1.00  4.41   222.  10.
  32.50  2.53  2.53      772.       613.      1385.     7.95     6.31    14.26
   0.219    0.174    0.392       7.131       0.031         1.376         0.375
Ret.ExistScrub & SCR            41
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
```

```
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: UPNY     (Emissions By Plant)
---------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  UPNY  TSYBA0141022020105 01              BE3:18.4 0.04  0.25  1.84   675.   0.
  36.20  3.91  3.91     2801.      2225.      5026.    25.74    20.44    46.18
   0.541    0.429    0.970       5.842       0.043         4.301         1.173
  UPNY  TSXBA0141022020105 01              BE3:18.4 0.04  0.09  1.84   157.   0.
  43.50  3.91  3.91      652.       517.      1169.     6.23     4.95    11.17
   0.131    0.104    0.235       0.492       0.010         1.040         0.284
Scrubbed Coal                  2
  UPNY  TSXBS0141022020103 01              BG1: 8.0 0.42  0.20  2.73   149.   0.
  43.00  2.94  2.94      618.       491.      1109.     5.85     4.64    10.49
   1.228    0.975    2.203       1.049       0.014         0.977         0.266
Unscrubbed Coal_NOx            3
  UPNY  TCOLN0131022020102 01              BA2: 5.2 0.26  1.10  3.31    47.   0.
```

```
  32.20  2.45  2.45        0.       155.       155.     0.00     1.61     1.61
   0.000    0.209    0.209       0.886       0.003         0.150         0.041
  UPNY  TCOLN0131022020102 01              BD2:12.5 0.26  1.50  8.03    47.   0.
  32.20  2.45  2.45      195.         0.       195.     2.03     0.00     2.03
   0.264    0.000    0.264       1.521       0.008         0.189         0.052
  UPNY  TSFBO0141022020102 01              BA2: 5.2 0.21  1.10  3.31   105.   0.
  32.30  1.54  1.54      436.       346.       782.     4.18     3.32     7.50
   0.433    0.344    0.776       4.124       0.012         0.698         0.190
  UPNY  TSFBN0131022020102 01              BA2: 5.2 0.25  1.10  3.31   210.   0.
  32.20  2.45  2.45        0.       535.       535.     0.00     5.35     5.35
   0.000    0.658    0.658       2.941       0.009         0.498         0.136
  UPNY  TSFBN0131022020102 01              BD2:12.5 0.25  1.50  8.03   210.   0.
  32.20  2.45  2.45      872.       157.      1029.     8.71     1.57    10.28
   1.071    0.193    1.265       7.710       0.041         0.957         0.261
Unscrubbed Coal                 4
  UPNY  TCOLU0111022050110 01              BD2:12.5 0.35  1.50  8.03   117.   0.
  32.00  1.54  1.54      486.       386.       871.     5.05     4.01     9.06
   0.884    0.702    1.586       6.795       0.036         0.844         0.230
  UPNY  TCOLU0111022020210 01              BE3:18.4 0.46  2.20 16.58    44.   0.
  32.00  1.54  1.54      183.       145.       328.     1.90     1.51     3.41
   0.437    0.347    0.784       3.748       0.028         0.317         0.087
  UPNY  TCOLU0111022050210 01              BD2:12.5 0.35  1.50 12.54    82.   0.
  32.00  1.54  1.54      340.       270.       611.     3.54     2.81     6.35
   0.619    0.492    1.111       4.763       0.040         0.591         0.161
  UPNY  TCOLU0131022020110 01              BA2: 5.2 0.46  1.10  3.31    55.   0.
  32.00  1.54  1.54        0.       181.       181.     0.00     1.89     1.89
   0.000    0.434    0.434       1.037       0.003         0.176         0.048
  UPNY  TCOLU0131022020110 01              BD2:12.5 0.46  1.50  8.03    55.   0.
  32.00  1.54  1.54      228.         0.       228.     2.37     0.00     2.37
   0.546    0.000    0.546       1.780       0.010         0.221         0.060
  UPNY  TSCBU0131022020110 01              BD2:12.5 0.45  1.50  8.03   362.   0.
  32.00  1.54  1.54     1502.      1193.      2696.    15.62    12.41    28.03
   3.547    2.817    6.364      21.025       0.112         2.611         0.712
  UPNY  TSCBU0141022020210 01              BA2: 5.2 0.30  1.10  4.65   387.   0.
  32.00  1.54  1.54     1606.      1276.      2882.    16.70    13.27    29.97
   2.480    1.970    4.451      16.483       0.070         2.791         0.761
  UPNY  TSFBU0131022020210 01              BA2: 5.2 0.35  1.10  4.65   266.   0.
  32.00  1.54  1.54     1104.       877.      1981.    11.24     8.93    20.17
   1.990    1.581    3.571      11.095       0.047         1.879         0.512
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  UPNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   498.   0.
 192.50  0.74  0.74     2358.      1686.      4044.    24.73    17.69    42.42
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  UPNY  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   619.   0.
 206.50  1.07  1.07     2237.      2271.      4508.    24.03    24.39    48.42
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  UPNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1154.   0.
 117.70  0.78  0.78     4726.      4237.      8964.    50.76    45.51    96.27
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  UPNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   840.   0.
 192.60  0.77  0.77     3489.      3081.      6571.    34.77    30.70    65.47
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  UPNY  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  5551.   0.
  15.50  0.00  0.00    15534.     10355.     25889.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
IGCC                           10
Turbine                        11
Biomass                        12
  UPNY  BIOMS00  47 000000 00              B1-: 0.6 0.02  0.08  0.57    18.   0.
  44.80  5.36  5.36        78.        60.       138.     0.72     0.56     1.28
   0.007    0.006    0.013       0.051       0.000         0.000         0.000
```

```
Geothermal                    13
Landfill Gas                  14
  UPNY  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     6.   0.
  78.60 10.48 10.48       27.        20.        47.     0.37     0.28     0.65
   0.045    0.034    0.079       0.000       0.000         0.000         0.000
Wind                          15
  UPNY  WIND 00     000000 00              NONE     0.00  0.00 71.00   194.   0.
  26.40  0.00  0.00       87.        49.       136.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
  UPNY  FCELL00     000000 00              GAS      0.40  0.00  0.00     1.   0.
  15.00  2.06  2.06        5.         3.         8.     0.03     0.03     0.06
   0.007    0.005    0.012       0.000       0.000         0.003         0.001
Solar                         17
Non Fossil_Other              18
  UPNY  OTHER00     000000 00              NONE     0.00  0.00 71.00    34.   0.
 103.60  0.00  0.00      150.       118.       268.     1.65     1.30     2.95
   0.000    0.000    0.000       0.000       0.105         0.000         0.000
Fossil_Other                  19
Pump Storage                  20
Int. Imports                  21
  UPNY  NYIMP00     000000 00              NONE     0.00  0.00 71.00  3000.   0.
   0.00  0.00  0.00     4228.      3051.      7280.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                      22
  UPNY  CGCOU0131022050710 01              BA2: 5.2 0.35  1.10  5.17    80.   0.
  11.70  1.54  1.54      324.       261.       585.     2.47     2.00     4.47
   0.433    0.350    0.783       2.460       0.012         0.416         0.114
  UPNY  CGCOS0131022050304 01              BG1: 8.0 0.35  0.25  3.22    44.   0.
  23.10  2.94  2.94      178.       144.       322.     1.74     1.41     3.15
   0.305    0.246    0.551       0.394       0.005         0.293         0.080
  UPNY  CGCOD0131022050307 01              BE3:18.4 0.23  0.21  0.55    50.   0.
  23.30  3.84  3.84      202.       163.       366.     1.62     1.31     2.93
   0.184    0.149    0.333       0.313       0.001         0.273         0.074
Cgn_Gas                       23
  UPNY  CGCC 0122   000000 00              GAS      0.18  0.00  0.00  1566.   0.
  13.90  1.03  1.03     4902.        37.      4939.    39.47     0.30    39.76
   3.611    0.027    3.638       0.000       0.000         2.110         0.576
Cgn_Oil                       24
Cgn_Other                     25
  UPNY  CGOTH00     000000 00              NONE     0.00  0.00 71.00    44.   0.
 103.60  0.00  0.00      191.       147.       338.     2.55     1.97     4.52
   0.000    0.000    0.000       0.000       0.160         0.000         0.000
NonCG IPP_Coal                26
NonCG IPP_Gas                 27
NonCG IPP_Other               28
Blr_Coal                      29
Blr_Gas                       30
Blr_Oil                       31
Blr_Other                     32
SteamOnly Cogen               33
Rep.Coal-CC                   34
Rep.O/G-CC                    35
Rep.Coal-IGCC                 36
Ret.Scrubber                  37
Ret.ExistSCR & Scrub          38
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
Ret.ExistScrub & SCR          41
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  UPNY  TSGBU0141022020210 01     RL01     BE3:18.4 0.05  0.09  1.84   403.  40.
  44.69  3.58  3.58     1674.      1330.      3003.    17.77    14.12    31.89
   0.444    0.353    0.797       1.403       0.029         2.970         0.810
```

```
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: DSNY     (Emissions By Plant)
--------------------------------------------------
```

	NOx			SO2	MER	CO2	Carbon
	Generation					Trillion	
	Emission		Emission	Emission	Emission	Emission	Emission
					(lb/MBtu)	(lb/TBtu)	(MW) $
/KWyr	VOM Mill/KWh	(GWh)			(Btu)		
	(1000 Tons)		(1000 Tons)	(Tons)	(Mil Tonnes)	(Mil Tonnes)	
Unit				Fuel	NOx	SO2 MERCURY	Cap. Cap
. FO&M WINT. SUMM.	WINTER		SUMMER	Total	WINTER	SUMMER	Total
WINTER SUMMER	Total		Total	Total	Total		Total
Scrubbed Coal_NOx		1					
Scrubbed Coal		2					
Unscrubbed Coal_NOx		3					
Unscrubbed Coal		4					
DSNYNYTSABU0141012020110 01				BA2: 5.2	0.38	1.10	3.31 541. 0.
25.60 1.54 1.54	2245.		1783.	4028.	22.87	18.16	41.03
4.287 3.405	7.692		22.564	0.068	3.820		1.042
DSNYNYTSABU0142012020110 01				BA2: 5.2	0.37	0.80	3.31 197. 0.
26.40 1.54 1.54	818.		649.	1467.	8.87	7.04	15.91
1.636 1.299	2.935		6.370	0.026	1.482		0.404
Oil/Gas Steam		5					

```
Oil/Gas Steam_Nox              6
Nuclear                        7
  DSNY  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   984.   0.
 195.30  1.03  1.03     4611.      3610.      8221.    47.62    37.28    84.90
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  DSNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   967.   0.
 237.60  1.25  1.25     2849.      3501.      6350.    28.82    35.42    64.24
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  DSNY  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   442.   0.
  14.60  0.00  0.00     1237.       824.      2061.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  DSNY  CC   0122   000000 00              GAS      0.02  0.00  0.00  1830.   0.
  13.90  1.03  1.03     8202.      6291.     14493.    61.51    47.18   108.70
   0.615    0.472    1.087       0.000       0.000         5.769         1.573
  DSNY  CC   0123   000000 00              GAS      0.19  0.00  0.00   101.   0.
  13.90  1.03  1.03       23.        52.        75.     0.25     0.58     0.83
   0.023    0.054    0.077       0.000       0.000         0.044         0.012
IGCC                          10
Turbine                       11
Biomass                       12
Geothermal                    13
Landfill Gas                  14
Wind                          15
  DSNY  WIND 00     000000 00              NONE     0.00  0.00 71.00    64.   0.
  26.40  0.00  0.00       29.        16.        45.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
  DSNY  OTHER00     000000 00              NONE     0.00  0.00 71.00    82.   0.
 103.60  0.00  0.00      361.       285.       646.     3.98     3.14     7.11
   0.000    0.000    0.000       0.000       0.252         0.000         0.000
Fossil_Other                  19
Pump Storage                  20
  DSNY  PUMPS00     000000 00              NONE     0.00  0.00 71.00  1040.   0.
   6.50  0.00  0.00        0.       155.       155.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                  21
Cgn_Coal                      22
Cgn_Gas                       23
  DSNY  CGCC 0113   000000 00              GAS      0.19  0.00  0.00    35.   0.
  13.90  1.03  1.03       24.        18.        42.     0.22     0.17     0.39
   0.021    0.016    0.036       0.000       0.000         0.021         0.006
  DSNY  CGCC 0123   000000 00              GAS      0.19  0.00  0.00   487.   0.
  13.90  1.03  1.03      233.       251.       484.     2.20     2.36     4.56
   0.205    0.221    0.426       0.000       0.000         0.242         0.066
Cgn_Oil                       24
Cgn_Other                     25
  DSNY  CGOTH00     000000 00              NONE     0.00  0.00 71.00     7.   0.
 103.60  0.00  0.00       30.        23.        54.     0.13     0.10     0.23
   0.000    0.000    0.000       0.000       0.008         0.000         0.000
NonCG IPP_Coal                26
NonCG IPP_Gas                 27
NonCG IPP_Other               28
Blr_Coal                      29
Blr_Gas                       30
Blr_Oil                       31
Blr_Other                     32
SteamOnly Cogen               33
Rep.Coal-CC                   34
Rep.O/G-CC                    35
Rep.Coal-IGCC                 36
Ret.Scrubber                  37
```

Ret.ExistSCR & Scrub	38
Ret.ExistSNCR & Scrub	39
Ret.SCR	40
Ret.ExistScrub & SCR	41
Ret.SNCR	42
Ret.ExistScrub & SNCR	43
Ret.SCR+Scrb	44
Ret.SNCR+Scrub	45
Ret.Gas Reburn	46
Ret.ExistScrub+GasR	47
Ret.GasReburn+Scrub	48
Ret.ACI	49
Ret.ExistScrub&ACI	50
Ret.ExistSCR&ACI	51
Ret.ExistSNCR&ACI	52
Ret.ACI & SCR	53
Ret.ExistScrub&ACI&SCR	54
Ret.ACI & SNCR	55
Ret.ExistScrub&ACI&SNCR	56
Ret.ACI & Srub	57
Ret.ExistSCR&ACI&Scrub	58
Ret.ExistSNCR&ACI&Scrub	59
Ret.ExistSNCR&ExistScrub&ACI	60
Ret.ExistSCR&ExistScrub&ACI	61
Ret.ExistNOx&ExistScrub&ACI	62
Ret.SCR & Scrub & ACI	63
Ret.SNCR & Scrub & ACI	64
Ret.O/G SCR	65
Ret.O/G SNCR	66
Ret.Nuclear (age 30+10 yrs)	67
Ret.Nuclear (age 40+20 yrs)	68
Ret. Biomass Cofiring	69
CT Early Retirement	70
CC Early Retirement	71
O/G Early Retirement	72
Coal Early Retirement	73
Nuke Early Retirement	74

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation reported in BBtu

---

Year: 2010, Region: NYC (Emissions By Plant)

| | NOx | | SO2 | | MER | CO2 | | Carbon | | |

```
Oil/Gas Steam                    5
  NYC   STLSU0121   000000 00              GAS      0.14  0.00  0.00  4747.   0.
  20.90  2.57  2.57     5809.      6523.     12332.    55.42    62.23   117.65
   3.796    4.263    8.059       0.000       0.000         6.244         1.703
Oil/Gas Steam_Nox                6
Nuclear                          7
Hydro                            8
Comb.Cycle Gas                   9
  NYC   CC   0122   000000 00              GAS      0.10  0.00  0.00   490.   0.
  13.90  1.03  1.03     1647.      1263.      2910.    13.19    10.11    23.30
   0.686    0.526    1.212       0.000       0.000         1.237         0.337
  NYC   CC   0123   000000 00              GAS      0.19  0.00  0.00    78.   0.
  13.90  0.00  1.03        0.        13.        13.     0.00     0.15     0.15
   0.000    0.014    0.014       0.000       0.000         0.008         0.002
IGCC                            10
Turbine                         11
  NYC   CT   0113   000000 00              GAS      0.13  0.00  0.00    85.   0.
  11.20  0.00  1.03        0.        14.        14.     0.00     0.18     0.18
   0.000    0.011    0.011       0.000       0.000         0.010         0.003
  NYC   CT   0122   000000 00              GAS      0.08  0.00  0.00   460.   0.
   2.80  1.03  1.03      106.        79.       186.     1.16     0.87     2.03
   0.046    0.035    0.081       0.000       0.000         0.108         0.029
Biomass                         12
Geothermal                      13
Landfill Gas                    14
Wind                            15
  NYC   WIND 00     000000 00              NONE     0.00  0.00 71.00    59.   0.
  26.40  0.00  0.00       27.        15.        41.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
Cgn_Gas                         23
  NYC   CGCT 0112   000000 00              GAS      0.13  0.00  0.00     2.   0.
   2.80  1.03  1.03        4.         5.         9.     0.04     0.05     0.09
   0.003    0.003    0.006       0.000       0.000         0.005         0.001
  NYC   CGCC 0112   000000 00              GAS      0.19  0.00  0.00    15.   0.
  13.90  1.03  1.03       50.        39.        89.     0.44     0.34     0.78
   0.041    0.032    0.073       0.000       0.000         0.042         0.011
  NYC   CGCC 0113   000000 00              GAS      0.19  0.00  0.00    46.   0.
  14.10  1.03  1.03      155.       119.       273.     1.41     1.08     2.50
   0.132    0.101    0.233       0.000       0.000         0.133         0.036
Cgn_Oil                         24
Cgn_Other                       25
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
Ret.ExistScrub & SCR            41
Ret.SNCR                        42
```

```
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: LILC     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
Oil/Gas Steam                  5
  LILC  STLSU0121   000000 00              GAS      0.09  0.00  0.00   987.   0.
  20.70  2.57  2.57      119.      1084.      1203.     1.25    11.41    12.66
   0.057    0.519    0.576       0.000       0.000         0.672         0.183
Oil/Gas Steam_Nox              6
```

```
Nuclear                          7
Hydro                            8
Comb.Cycle Gas                   9
  LILC  CC   0113   000000 00                GAS      0.19  0.00  0.00    22.   0.
  19.90  1.03  1.03       15.        34.        49.     0.16     0.38     0.54
   0.015    0.035    0.051       0.000       0.000         0.029         0.008
  LILC  CC   0122   000000 00                GAS      0.06  0.00  0.00   136.   0.
  13.90  1.03  1.03      457.       351.       808.     3.60     2.76     6.36
   0.106    0.081    0.188       0.000       0.000         0.337         0.092
  LILC  CC   1     (b)                       GAS      0.02  0.00  0.00   370.  72.
  11.70  1.95  1.95     1703.      1229.      2932.    12.02     8.67    20.69
   0.120    0.087    0.207       0.000       0.000         1.098         0.299
IGCC                            10
Turbine                         11
  LILC  CT   0112   000000 00                GAS      0.10  0.00  0.00     9.   0.
  11.20  1.03  1.03       31.        23.        55.     0.31     0.23     0.55
   0.016    0.012    0.028       0.000       0.000         0.029         0.008
  LILC  CT   0114   000000 00                GAS      0.13  0.00  0.00   332.   0.
  11.10  0.00  1.03        0.        13.        13.     0.00     0.18     0.18
   0.000    0.012    0.012       0.000       0.000         0.010         0.003
  LILC  CT   0122   000000 00                GAS      0.08  0.00  0.00   405.   0.
   2.80  1.03  1.03      436.       817.      1253.     4.77     8.93    13.70
   0.191    0.357    0.548       0.000       0.000         0.727         0.198
  LILC  CT   0123   000000 00                GAS      0.12  0.00  0.00   902.   0.
  10.30  1.03  1.03      113.       155.       269.     1.50     2.05     3.55
   0.090    0.124    0.215       0.000       0.000         0.188         0.051
Biomass                         12
Geothermal                      13
Landfill Gas                    14
Wind                            15
  LILC  WIND 00     000000 00                NONE     0.00  0.00 71.00    36.   0.
  26.40  0.00  0.00       16.         9.        25.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  LILC  OTHER00     000000 00                NONE     0.00  0.00 59.78   137.   0.
 103.60  0.00  0.00      604.       476.      1080.     6.64     5.24    11.88
   0.000    0.000    0.000       0.000       0.355         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
Cgn_Gas                         23
  LILC  CGCT 0111   000000 00                GAS      0.13  0.00  0.00     1.   0.
   2.80  1.03  1.03        3.         3.         6.     0.03     0.02     0.05
   0.002    0.001    0.003       0.000       0.000         0.003         0.001
  LILC  CGCT 0112   000000 00                GAS      0.13  0.00  0.00    15.   0.
   2.80  1.03  1.03       52.        39.        91.     0.52     0.38     0.90
   0.033    0.024    0.057       0.000       0.000         0.048         0.013
  LILC  CGCC 0112   000000 00                GAS      0.19  0.00  0.00    13.   0.
  13.90  1.03  1.03       58.        45.       103.     0.44     0.34     0.78
   0.041    0.032    0.073       0.000       0.000         0.041         0.011
  LILC  CGCC 0113   000000 00                GAS      0.19  0.00  0.00    61.   0.
  13.90  1.03  1.03      205.       157.       362.     2.08     1.60     3.68
   0.195    0.149    0.344       0.000       0.000         0.195         0.053
  LILC  CGCC 0122   000000 00                GAS      0.19  0.00  0.00    43.   0.
  13.90  1.03  1.03      193.       111.       304.     1.45     0.84     2.29
   0.136    0.078    0.214       0.000       0.000         0.121         0.033
Cgn_Oil                         24
Cgn_Other                       25
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
```

```
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
  LILC  STLSU0121   000000 00     OC01     GAS      0.02  0.00  0.00   322.  65.
  11.70  1.95  1.95     1441.      1105.      2547.    10.41     7.98    18.39
   0.104    0.080    0.184       0.000       0.000         0.976         0.266
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-----------------------------------------------------------------------------
Year: 2010, Region: NENG     (Emissions By Plant)
--------------------------------------------------

            NOx                  SO2         MER           CO2          Carbon

                       Generation                     Trillion
```

```
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx                1
  NENG  TSDBD2831012020107 01              BE3:18.4 0.20  0.11  6.26    78.   0.
  43.10  3.85  3.85      324.       257.       581.     3.37     2.68     6.04
   0.339    0.269    0.607       0.332       0.019         0.563         0.153
Scrubbed Coal                    2
Unscrubbed Coal_NOx              3
  NENGNHTCOLN2931012020102 01              BD2:12.5 0.30  1.50  8.03    97.   0.
  32.20  2.45  2.45      403.       143.       546.     4.19     1.49     5.68
   0.626    0.223    0.849       4.257       0.023         0.529         0.144
  NENG  TSDBN2841012020102 01              BA2: 5.2 0.19  1.10  3.31   142.   0.
  32.20  2.45  2.45      264.       210.       474.     2.72     2.16     4.88
   0.264    0.210    0.474       2.687       0.008         0.455         0.124
Unscrubbed Coal                  4
  NENG  TCOLU0911012050710 01              BA2: 5.2 0.43  1.10  5.17    14.   0.
  17.40  1.54  1.54       58.        46.       104.     0.60     0.48     1.08
   0.130    0.103    0.233       0.596       0.003         0.101         0.028
  NENGCTTSABU3241012020110 01              BA2: 5.2 0.24  1.10  3.31   385.   0.
  26.40  1.54  1.54      433.       344.       776.     4.17     3.31     7.48
   0.492    0.391    0.883       4.115       0.012         0.697         0.190
  NENG  TSEBU2841012020110 01              BA2: 5.2 0.36  1.10  3.31  1193.   0.
  29.30  1.54  1.54      948.       753.      1702.     8.84     7.02    15.85
   1.599    1.270    2.869       8.719       0.026         1.476         0.403
Oil/Gas Steam                    5
Oil/Gas Steam_Nox                6
Nuclear                          7
  NENG  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   675.   0.
 254.10  1.32  1.32     3434.      1973.      5407.    34.95    20.08    55.03
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   506.   0.
 240.70  1.18  1.18     2574.      1726.      4300.    26.06    17.47    43.53
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   872.   0.
 211.90  1.17  1.17     4199.      2661.      6860.    42.63    27.01    69.64
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1157.   0.
 158.10  1.23  1.23     5326.      3794.      9120.    53.06    37.80    90.86
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1161.   0.
 122.00  0.75  0.75     4570.      4263.      8833.    46.39    43.28    89.67
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  NENG  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2059.   0.
  15.20  0.00  0.00     3489.      1724.      5212.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  NENG  CC   0113   000000 00              GAS      0.11  0.00  0.00    96.   0.
  14.30  0.00  1.03        0.        16.        16.     0.00     0.18     0.18
   0.000    0.010    0.010       0.000       0.000         0.010         0.003
  NENG  CC   0122   000000 00              GAS      0.03  0.00  0.00  5859.   0.
  14.00  1.03  1.03    16768.     11754.     28522.   127.66    89.48   217.14
   2.106    1.476    3.583       0.000       0.000        11.524         3.143
  NENG  CC   0912   000000 00              GAS      0.02  0.00  0.00    33.   0.
  13.90  1.03  1.03      148.       113.       261.     1.11     0.85     1.96
   0.011    0.009    0.020       0.000       0.000         0.104         0.028
  NENG  CC   0922   000000 00              GAS      0.02  0.00  0.00  1351.   0.
  13.90  1.03  1.03     6055.      4644.     10699.    45.41    34.83    80.25
   0.454    0.348    0.802       0.000       0.000         4.259         1.161
  NENGCTCC   3222   000000 00              GAS      0.04  0.00  0.00  1684.   0.
```

```
  13.90  1.03  1.03     7547.      5789.     13337.    57.37    44.00   101.37
   1.090    0.836    1.926       0.000       0.000         5.380         1.467
  NENGNHCC   3022   000000 00              GAS      0.02  0.00  0.00  1245.   0.
  13.90  1.03  1.03     5580.      4280.      9860.    41.85    32.10    73.95
   0.418    0.321    0.739       0.000       0.000         3.925         1.070
IGCC                          10
Turbine                       11
  NENG  CT   0112   000000 00              GAS      0.11  0.00  0.00    37.   0.
   9.30  1.03  1.03        9.         6.        15.     0.08     0.06     0.15
   0.005    0.004    0.008       0.000       0.000         0.008         0.002
  NENGCTCT   3212   000000 00              GAS      0.12  0.00  0.00     6.   0.
  10.60  1.03  1.03        1.         3.         4.     0.01     0.03     0.04
   0.001    0.002    0.003       0.000       0.000         0.002         0.001
  NENGCTCT   3222   000000 00              GAS      0.08  0.00  0.00   333.   0.
   2.80  0.00  1.03        0.         5.         5.     0.00     0.06     0.06
   0.000    0.002    0.002       0.000       0.000         0.003         0.001
Biomass                       12
  NENG  BIOMS00  48 000000 00              B1-: 0.6 0.02  0.08  0.57   309.   0.
  44.80  5.36  5.36      929.       155.      1084.     8.51     1.42     9.93
   0.085    0.014    0.099       0.397       0.003         0.000         0.000
  NENG  BIOCC0     (a)                     B1-: 0.6 0.02  0.08  0.57     5. 215.
  44.80  5.34  5.34       21.        15.        37.     0.18     0.13     0.30
   0.002    0.001    0.003       0.012       0.000         0.000         0.000
Geothermal                    13
Landfill Gas                  14
  NENG  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    18.   0.
  78.60 10.48 10.48       81.        61.       142.     1.10     0.84     1.94
   0.135    0.103    0.238       0.000       0.000         0.000         0.000
  NENG  LG   0     (a)                     WASTE    0.25  0.00  0.00    52. 195.
  78.60 10.48 10.48      223.       161.       384.     2.23     1.61     3.84
   0.274    0.198    0.472       0.000       0.000         0.000         0.000
Wind                          15
  NENG  WIND 00     000000 00              NONE     0.00  0.00 71.00    31.   0.
  26.40  0.00  0.00       14.         8.        22.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  WIN510     (a)                     NONE     0.00  0.00 71.00   160. 155.
  26.40  0.00  0.00      305.       156.       461.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
  NENG  FCELL00     000000 00              GAS      0.40  0.00  0.00     1.   0.
  15.00  2.06  2.06        1.         1.         1.     0.01     0.00     0.01
   0.001    0.001    0.002       0.000       0.000         0.000         0.000
Solar                         17
Non Fossil_Other              18
  NENG  OTHER00     000000 00              NONE     0.00  0.00 70.72   537.   0.
 103.60  0.00  0.00     2367.      1867.      4234.    26.04    20.53    46.57
   0.000    0.000    0.000       0.000       1.647         0.000         0.000
Fossil_Other                  19
Pump Storage                  20
  NENG  PUMPS00     000000 00              NONE     0.00  0.00 71.00  1959.   0.
   6.50  0.00  0.00      163.       292.       455.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                  21
  NENG  NHIMP00     000000 00              NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00     5424.      3914.      9338.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                      22
  NENG  CGCOU0931012050710 01              BA2: 5.2 0.43  1.10  5.17    76.   0.
  11.70  1.54  1.54      308.       248.       556.     2.63     2.12     4.75
   0.566    0.456    1.022       2.614       0.012         0.443         0.121
  NENGCTCGCOS3141012050703 01              BG1: 8.0 0.20  0.25  4.66   195.   0.
  23.10  2.94  2.94      516.       416.       932.     4.99     4.03     9.02
   0.507    0.409    0.916       1.128       0.021         0.840         0.229
Cgn_Gas                       23
  NENG  CGCT 0912   000000 00              GAS      0.10  0.00  0.00     7.   0.
```

```
   2.80  1.03  1.03        2.         1.         3.     0.02     0.01     0.03
   0.001    0.001    0.001       0.000       0.000         0.001         0.000
  NENGCTCGCT 3112   000000 00               GAS      0.13  0.00  0.00     3.   0.
   2.80  1.03  1.03        1.         1.         1.     0.01     0.00     0.01
   0.000    0.000    0.001       0.000       0.000         0.001         0.000
  NENGNHCGCT 3012   000000 00               GAS      0.08  0.00  0.00     5.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  CGCC 0113   000000 00               GAS      0.12  0.00  0.00    13.   0.
  13.90  1.03  1.03        3.         7.        10.     0.03     0.06     0.09
   0.002    0.004    0.005       0.000       0.000         0.005         0.001
  NENG  CGCC 0122   000000 00               GAS      0.12  0.00  0.00   661.   0.
  13.90  1.03  1.03      444.       340.       785.     3.55     2.72     6.27
   0.215    0.165    0.379       0.000       0.000         0.333         0.091
  NENG  CGCC 0123   000000 00               GAS      0.13  0.00  0.00   132.   0.
  13.90  1.03  1.03       30.        23.        52.     0.28     0.22     0.50
   0.018    0.014    0.032       0.000       0.000         0.026         0.007
  NENGCTCGCC 3112   000000 00               GAS      0.20  0.00  0.00    13.   0.
  13.90  1.03  1.03        9.         7.        15.     0.07     0.05     0.13
   0.007    0.005    0.013       0.000       0.000         0.007         0.002
  NENGCTCGCC 3113   000000 00               GAS      0.20  0.00  0.00     1.   0.
  14.90  1.03  1.03        0.         1.         1.     0.00     0.00     0.01
   0.000    0.000    0.001       0.000       0.000         0.000         0.000
  NENGCTCGCC 3122   000000 00               GAS      0.04  0.00  0.00    32.   7.
  15.60  1.13  1.13       22.        16.        38.     0.18     0.13     0.31
   0.004    0.003    0.006       0.000       0.000         0.016         0.004
  NENGCTCGCC 3123   000000 00               GAS      0.04  0.00  0.00    73.   6.
  16.50  1.13  1.13       16.        13.        29.     0.16     0.12     0.29
   0.003    0.002    0.006       0.000       0.000         0.015         0.004
Cgn_Oil                        24
Cgn_Other                      25
  NENG  CGBIO00  48 000000 00               B1-: 0.6 0.02  0.08  0.57    72.   0.
  44.80  5.36  5.36      312.       241.       553.     2.66     2.06     4.72
   0.027    0.021    0.047       0.189       0.001         0.000         0.000
  NENG  CGOTH00     000000 00               NONE     0.00  0.00 52.33    27.   0.
 103.60  0.00  0.00      117.        90.       207.     0.19     0.14     0.33
   0.000    0.000    0.000       0.000       0.009         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
  NENG  TSDBN2831012020102 01     CC01     GAS      0.02  0.00  0.00   152.  65.
  11.70  1.95  1.95      681.       523.      1204.     4.92     3.77     8.69
   0.049    0.038    0.087       0.000       0.000         0.461         0.126
  NENG  TSEBN2842012020102 01     CC01     GAS      0.02  0.00  0.00    61.  65.
  11.70  1.95  1.95      273.       210.       483.     1.97     1.51     3.49
   0.020    0.015    0.035       0.000       0.000         0.185         0.050
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
  NENGCTTSABU3241012020110 01     ML02     BA2: 5.2 0.24  0.04  1.76   101.  26.
  36.57  2.51  2.51      417.       332.       749.     4.11     3.26     7.37
   0.485    0.385    0.870       0.162       0.006         0.686         0.187
Ret.ExistSCR & Scrub           38
  NENGNHTSABC2941011010101 01     ML01     BE3:18.4 0.10  0.09  1.84   424.  28.
  40.11  3.49  3.49     1759.      1397.      3157.    17.34    13.77    31.11
   0.858    0.682    1.540       1.369       0.029         2.897         0.790
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
```

```
  NENGCTCGCOS3141012050703 01     SCR1     BE3:18.4 0.05  0.11  1.84    68.  10.
  23.70  3.94  3.94      273.       221.       494.     2.65     2.14     4.78
   0.066    0.053    0.120       0.263       0.004         0.445         0.121
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  NENGCTTSABU3241012020110 01     RL02     BA2: 5.2 0.05  0.04  0.52   174.  34.
  37.07  3.43  3.43      723.       575.      1298.     7.12     5.65    12.77
   0.178    0.141    0.319       0.281       0.003         1.190         0.324
  NENG  TSEBU2841012020110 01     RL02     BE3:18.4 0.05  0.09  1.84   140.  38.
  41.03  3.44  3.44      583.       463.      1046.     5.54     4.40     9.95
   0.139    0.110    0.249       0.438       0.009         0.926         0.253
  NENG  TSEBU2841012020110 01     SCR1ML02 BE3:18.4 0.05  0.09  1.84   804.  38.
  41.04  3.44  3.44     3336.      2649.      5985.    31.73    25.20    56.93
   0.793    0.630    1.423       2.505       0.052         5.302         1.446
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-----------------------------------------------------------------------------
Year: 2010, Region: FRCC     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
```

```
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total          Total
Scrubbed Coal_NOx              1
  FRCCFLTSXBA1541122020105 01              BG1: 8.0 0.15  0.20  0.80   441.   0.
  23.60  3.91  3.91     1830.      1454.      3284.    19.03    15.12    34.15
   1.428    1.134    2.561       3.415       0.014         3.180         0.867
  FRCCFLTSXBA1541132020105 01              BG1: 8.0 0.10  0.25  0.80   430.   0.
  43.30  3.91  3.91     1785.      1417.      3202.    17.05    13.54    30.59
   0.852    0.677    1.530       3.824       0.012         2.849         0.777
  FRCCFLTSABA1541132020105 01              BE1: 6.1 0.10  0.11  0.61   842.   0.
  43.30  3.91  3.91     3494.      2775.      6270.    33.22    26.38    59.60
   1.661    1.319    2.980       3.278       0.018         5.550         1.514
  FRCCFLTSZBA1541122020105 01              BG1: 8.0 0.10  0.25  0.80   439.   0.
  36.20  3.91  3.91     1822.      1447.      3269.    17.30    13.74    31.05
   0.865    0.687    1.552       3.881       0.012         2.891         0.789
Scrubbed Coal                  2
  FRCCFLTSGBS1531132020103 01              BE1: 6.1 0.31  0.79  2.07    88.   0.
  43.00  2.94  2.94      365.       290.       655.     3.76     2.99     6.75
   0.574    0.456    1.029       2.658       0.007         0.629         0.171
  FRCCFLTSGBS1532132020103 01              BE1: 6.1 0.35  0.75  2.07    87.   0.
  43.00  2.94  2.94      361.       287.       648.     3.86     3.07     6.93
   0.678    0.538    1.217       2.600       0.007         0.646         0.176
  FRCCFLTSGBS1541132020103 01              BG1: 8.0 0.40  1.27  2.73   356.   0.
  43.00  2.94  2.94     1413.      1173.      2586.    14.48    12.03    26.52
   2.861    2.376    5.237      16.771       0.036         2.469         0.673
  FRCCFLTSGBS1541132020103 01              BF1: 6.8 0.40  0.76  2.32   356.   0.
  43.00  2.94  2.94       65.         0.        65.     0.67     0.00     0.67
   0.132    0.000    0.132       0.253       0.001         0.062         0.017
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  FRCCFLTCOLU1531132020110 01              BB2: 4.1 0.46  1.00  2.62    92.   0.
  32.00  1.54  1.54      382.       303.       685.     3.97     3.15     7.12
   0.913    0.725    1.639       3.562       0.009         0.663         0.181
  FRCCFLTSDBU1541132020110 01              BB2: 4.1 0.37  1.00  2.62   833.   0.
  28.90  1.54  1.54     3457.      2746.      6203.    32.93    26.16    59.09
   6.142    4.878   11.020      29.544       0.078         5.502         1.501
  FRCCFLTSDBU1541132020210 01              BB1: 3.4 0.31  1.00  3.07   218.   0.
  17.40  1.54  1.54      905.       719.      1623.     9.23     7.33    16.56
   1.435    1.140    2.575       8.279       0.025         1.542         0.421
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  FRCC  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   847.   0.
 143.80  0.53  0.53     3987.      3107.      7094.    43.55    33.94    77.49
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  FRCC  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   700.   0.
 155.20  0.57  0.57     3188.      2473.      5660.    35.14    27.26    62.39
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  FRCC  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   700.   0.
 155.20  0.57  0.57     3414.      2475.      5889.    37.60    27.27    64.87
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  FRCC  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   842.   0.
 232.80  1.24  1.24     3872.      2780.      6651.    41.31    29.66    70.97
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  FRCC  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   847.   0.
  93.80  0.53  0.53     3584.      3092.      6676.    39.80    34.33    74.12
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  FRCC  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00    47.   0.
  15.10  0.00  0.00       83.        38.       121.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  FRCCFLCC   1512   000000 00              GAS      0.05  0.00  0.00    85.   0.
```

```
  19.90  1.03  1.03      381.       292.       673.     2.97     2.28     5.24
   0.077    0.059    0.136       0.000       0.000         0.278         0.076
  FRCCFLCC   1513   000000 00               GAS      0.11  0.00  0.00    89.   0.
  19.50  1.03  1.03       20.       138.       158.     0.20     1.36     1.56
   0.010    0.072    0.083       0.000       0.000         0.083         0.023
  FRCCFLCC   1522   000000 00               GAS      0.05  0.00  0.00 15348.   0.
  14.10  1.03  1.03    38123.     37521.     75645.   295.42   290.75   586.17
   7.533    7.414   14.947       0.000       0.000        31.108         8.484
  FRCCFLCC   1523   000000 00               GAS      0.15  0.00  0.00   789.   0.
  14.40  0.00  1.03        0.       135.       135.     0.00     1.50     1.50
   0.000    0.111    0.111       0.000       0.000         0.080         0.022
  FRCCFLCC   1524   000000 00               GAS      0.10  0.00  0.00    34.   0.
  13.90  0.00  1.03        0.         6.         6.     0.00     0.07     0.07
   0.000    0.003    0.003       0.000       0.000         0.004         0.001
IGCC                           10
  FRCCFLIGCC 1541122050710 00               BG1: 8.0 0.10  0.00  0.40   250.   0.
  31.40  1.00  1.00     1083.       837.      1921.     7.88     6.09    13.97
   0.394    0.305    0.699       0.000       0.003         1.301         0.355
Turbine                        11
  FRCCFLCT   1512   000000 00               GAS      0.10  0.00  0.00    68.   0.
   9.60  1.03  1.03       16.       106.       121.     0.16     1.10     1.26
   0.008    0.057    0.066       0.000       0.000         0.067         0.018
  FRCCFLCT   1522   000000 00               GAS      0.08  0.00  0.00  5658.   0.
   3.00  1.03  1.03     1081.      3242.      4323.    11.86    35.57    47.43
   0.486    1.458    1.945       0.000       0.000         2.517         0.686
  FRCCFLCT   1523   000000 00               GAS      0.12  0.00  0.00  2073.   0.
  10.10  0.00  1.03        0.        91.        91.     0.00     1.15     1.15
   0.000    0.069    0.069       0.000       0.000         0.061         0.017
Biomass                        12
  FRCC  BIOMS00  49 000000 00               B1-: 0.6 0.02  0.08  0.57    54.   0.
  44.80  5.36  5.36      234.       181.       415.     2.16     1.67     3.83
   0.022    0.017    0.038       0.153       0.001         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  FRCC  LFGAS00     000000 00               WASTE    0.25  0.00  0.00     2.   0.
  78.60 10.48 10.48        9.         7.        16.     0.12     0.09     0.22
   0.015    0.011    0.026       0.000       0.000         0.000         0.000
Wind                           15
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  FRCC  OTHER00     000000 00               NONE     0.00  0.00 60.92   424.   0.
 103.60  0.00  0.00     1869.      1474.      3343.    20.56    16.21    36.77
   0.000    0.000    0.000       0.000       1.120         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
Cgn_Coal                       22
  FRCCFLCGCOU1541132050710 01               BB1: 3.4 0.46  1.00  3.41   653.   0.
  12.70  1.54  1.54     2643.      2133.      4777.    26.06    21.03    47.10
   5.955    4.806   10.762      23.548       0.080         4.386         1.196
Cgn_Gas                        23
  FRCCFLCGCT 1512   000000 00               GAS      0.11  0.00  0.00    27.   0.
   2.80  1.03  1.03        6.        42.        48.     0.06     0.42     0.48
   0.004    0.024    0.027       0.000       0.000         0.026         0.007
  FRCCFLCGCT 1522   000000 00               GAS      0.09  0.00  0.00   336.   0.
   2.80  0.00  1.03        0.        58.        58.     0.00     0.64     0.64
   0.000    0.030    0.030       0.000       0.000         0.034         0.009
  FRCCFLCGCC 1513   000000 00               GAS      0.14  0.00  0.00    18.   0.
  13.90  1.03  1.03        4.        28.        32.     0.04     0.27     0.31
   0.003    0.019    0.022       0.000       0.000         0.017         0.005
  FRCCFLCGCC 1522   000000 00               GAS      0.14  0.00  0.00   437.   0.
  13.90  1.03  1.03       98.       676.       774.     0.79     5.45     6.24
   0.056    0.384    0.440       0.000       0.000         0.331         0.090
  FRCCFLCGCC 1523   000000 00               GAS      0.14  0.00  0.00   454.   0.
```

```
  13.90  1.03  1.03      102.       702.       804.     0.98     6.77     7.75
   0.069    0.477    0.546       0.000       0.000         0.411         0.112
Cgn_Oil                        24
  FRCCFLCGGAU1511   000000 00              GAS      0.29  0.00  0.00    16.   0.
  11.70  0.00  2.57        0.        29.        29.     0.00     0.25     0.25
   0.000    0.037    0.037       0.000       0.000         0.013         0.004
Cgn_Other                      25
  FRCC  CGBIO00  49 000000 00              B1-: 0.6 0.02  0.08  0.57    61.   0.
  44.80  5.36  5.36      264.       204.       469.     2.26     1.74     4.00
   0.023    0.017    0.040       0.160       0.001         0.000         0.000
  FRCC  CGOTH00     000000 00              NONE     0.00  0.00  0.00    22.   0.
 103.60  0.00  0.00       95.        74.       169.     0.73     0.57     1.30
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
  FRCCFLTSEBS1541132020103 01     SCR1     BF1: 6.8 0.05  1.03  0.68   844.   8.
  43.10  3.85  3.85     3503.      2782.      6285.    35.92    28.53    64.45
   0.898    0.713    1.611      33.063       0.022         6.002         1.637
  FRCCFLTSZBS1541121020103 01     SCR2     BG1: 8.0 0.05  0.29  0.80   957.   8.
  36.00  3.84  3.84     3972.      3154.      7126.    38.34    30.45    68.79
   1.016    0.807    1.823       9.974       0.028         6.406         1.747
  FRCCFLTSZBS1541122020103 01     SCR1     BG1: 8.0 0.05  0.50  0.80  2315.   7.
  36.00  3.82  3.82     9608.      7631.     17238.    93.50    74.26   167.76
   2.338    1.857    4.194      41.941       0.067        15.623         4.261
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  FRCCFLTSDBU1541131020110 01     SO01     BG1: 8.0 0.05  0.25  0.80  1365.  27.
  25.47  3.75  3.75     5664.      4498.     10162.    54.04    42.92    96.96
   1.378    1.094    2.472      12.120       0.039         9.029         2.462
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
```

```
Ret.O/G SNCR                    66
Ret.Nuclear (age 30+10 yrs)     67
Ret.Nuclear (age 40+20 yrs)     68
Ret. Biomass Cofiring           69
CT Early Retirement             70
CC Early Retirement             71
O/G Early Retirement            72
Coal Early Retirement           73
Nuke Early Retirement           74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: VACA     (Emissions By Plant)
--------------------------------------------------


            NOx                   SO2         MER           CO2           Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
  VACAVATSXBD0341092020307 01              BG1: 8.0 0.19  0.20  0.24   882.   0.
  23.30  3.85  3.85     3660.      2907.      6568.    38.07    30.23    68.30
   3.655    2.903    6.557       6.830       0.008         6.361         1.735
  VACA  TSXBA0641101020105 01              BE2:10.4 0.06  0.11  1.04   270.   0.
  43.30  3.91  3.91        0.       890.       890.     0.00     8.88     8.88
   0.000    0.262    0.262       0.488       0.005         0.827         0.225
  VACA  TSXBA0641101020105 01              BD1: 5.1 0.06  0.08  0.51   270.   0.
  43.30  3.91  3.91     1121.         0.      1121.    11.18     0.00    11.18
   0.330    0.000    0.330       0.419       0.003         1.041         0.284
  VACA  TSXBA0641102020105 01              BE2:10.4 0.04  0.11  1.04  1100.   0.
  29.80  3.91  3.91        0.      2182.      2182.     0.00    20.77    20.77
   0.000    0.405    0.405       1.143       0.011         1.935         0.528
  VACA  TSXBA0641102020105 01              BE1: 6.1 0.04  0.11  0.61  1100.   0.
  29.80  3.91  3.91     2962.      1444.      4405.    28.19    13.74    41.94
   0.550    0.268    0.818       2.307       0.013         3.905         1.065
  VACA  TSXBA0641102020105 01              BD1: 5.1 0.04  0.08  0.51  1100.   0.
  29.80  3.91  3.91     1604.         0.      1604.    15.27     0.00    15.27
   0.298    0.000    0.298       0.572       0.004         1.422         0.388
  VACA  TSXBA0642101020105 01              BE2:10.4 0.06  0.11  1.04   270.   0.
  41.20  3.91  3.91        0.       890.       890.     0.00     9.44     9.44
   0.000    0.269    0.269       0.519       0.005         0.879         0.240
  VACA  TSXBA0642101020105 01              BE1: 6.1 0.06  0.11  0.61   270.   0.
  41.20  3.91  3.91     1121.         0.      1121.    11.89     0.00    11.89
   0.339    0.000    0.339       0.654       0.004         1.107         0.302
  VACAVATSBBA0341092020105 01              BF2:11.1 0.01  0.15  1.11   373.   0.
  43.50  3.91  3.91     1548.      1229.      2777.    14.59    11.59    26.18
   0.073    0.058    0.131       1.964       0.015         2.438         0.665
  VACAWVTSABA0641052020105 01              BF2:11.1 0.01  0.15  1.11  1066.   0.
  43.50  3.91  3.91     4424.      3514.      7938.    41.03    32.59    73.62
   0.205    0.163    0.368       5.522       0.041         6.856         1.870
  VACA  TSZBA0641052020105 01              BG1: 8.0 0.01  0.25  0.80   521.   0.
```

```
  43.30  3.91  3.91     2162.      1717.      3880.    21.20    16.83    38.03
   0.106    0.084    0.190       4.754       0.015         3.542         0.966
  VACAVATCOLD0331092050308 01              BG1: 8.0 0.24  0.18  3.22    57.   0.
  23.30  3.85  3.85      237.       188.       424.     2.46     1.95     4.41
   0.301    0.239    0.541       0.386       0.007         0.411         0.112
Scrubbed Coal                    2
  VACANCTCOLS0641102050304 01              BD1: 5.1 0.39  0.36  2.03   167.   0.
  23.10  2.94  2.94      693.       550.      1244.     7.21     5.72    12.93
   1.388    1.102    2.490       2.328       0.013         1.204         0.328
  VACAVATCOLS0331092050304 01              BG1: 8.0 0.38  0.13  3.22    35.   0.
  23.10  2.94  2.94      145.       115.       261.     1.51     1.20     2.71
   0.285    0.226    0.511       0.176       0.004         0.252         0.069
  VACA  TABS 0631042050304 01              BG1: 8.0 0.28  0.20  3.22    74.   0.
  23.10  2.94  2.94      307.       244.       551.     3.19     2.54     5.73
   0.442    0.351    0.794       0.573       0.009         0.534         0.146
  VACA  TSXBS0641102020304 01              BE2:10.4 0.15  0.09  0.52   385.   0.
  23.10  2.94  2.94     1598.      1269.      2867.    16.62    13.20    29.81
   1.246    0.990    2.236       1.312       0.008         2.776         0.757
Unscrubbed Coal_NOx              3
  VACANCTSABC0641101020201 01              BA2: 5.2 0.06  1.10  4.65   700.   0.
  23.00  2.51  2.51     1142.       760.      1902.    10.81     7.20    18.01
   0.319    0.212    0.531       9.905       0.042         1.677         0.457
  VACANCTSBBN0641102020102 01              BA2: 5.2 0.26  1.10  3.31   514.   0.
  32.20  2.45  2.45     2133.      1419.      3552.    20.12    13.38    33.50
   2.635    1.753    4.389      18.426       0.055         3.120         0.851
  VACAVATSBBN0341091020102 01              BA2: 5.2 0.35  1.10  3.31   389.   0.
  32.20  2.45  2.45     1352.      1074.      2426.    13.85    11.00    24.85
   2.396    1.903    4.299      13.667       0.041         2.314         0.631
  VACAVATSBBN0341092020102 01              BA2: 5.2 0.22  1.10  3.31   159.   0.
  32.20  2.45  2.45        0.       255.       255.     0.00     2.50     2.50
   0.000    0.274    0.274       1.377       0.004         0.233         0.064
  VACAVATSBBN0341092020102 01              BD1: 5.1 0.22  1.50  3.24   159.   0.
  32.20  2.45  2.45      660.       184.       844.     6.47     1.80     8.28
   0.709    0.197    0.906       6.208       0.013         0.771         0.210
  VACAVATSBBN0341092020202 01              BA2: 5.2 0.28  1.10  4.65   156.   0.
  32.20  2.45  2.45      647.       431.      1078.     6.34     4.22    10.56
   0.878    0.584    1.462       5.806       0.025         0.983         0.268
  VACASCTSEBC0641102020101 01              BD1: 5.1 0.04  1.50  3.24  1180.   0.
  27.00  2.51  2.51     4897.      3889.      8787.    47.89    38.03    85.92
   1.054    0.837    1.890      64.443       0.139         8.001         2.182
  VACASCTSEBC0641102020401 01              BD1: 5.1 0.05  1.50  1.01   350.   0.
  27.00  2.51  2.51     1453.      1154.      2606.    14.24    11.31    25.54
   0.320    0.254    0.575      19.156       0.013         2.378         0.649
  VACANCTSBBC0641101020101 01              BA2: 5.2 0.05  1.10  3.31   385.   0.
  32.50  2.51  2.51     1598.      1269.      2867.    14.80    11.76    26.56
   0.392    0.312    0.704      14.607       0.044         2.473         0.675
  VACANCTSBBC0641102020101 01              BA2: 5.2 0.05  1.10  3.31   354.   0.
  27.00  2.51  2.51     1469.       977.      2447.    13.93     9.27    23.21
   0.314    0.209    0.522      12.763       0.038         2.161         0.589
  VACAVATSBBC0341092020101 01              BA2: 5.2 0.01  1.10  3.31  1150.   0.
  29.30  2.51  2.51     4773.      3791.      8563.    45.00    35.74    80.73
   0.225    0.179    0.404      44.404       0.134         7.518         2.050
  VACANCTOLBO0632102020202 01              BA2: 5.2 0.27  1.10  4.65    76.   0.
  32.30  1.54  1.54      203.       161.       364.     2.18     1.73     3.92
   0.297    0.236    0.533       2.154       0.009         0.365         0.099
  VACANCTSGBC0641102020101 01              BA2: 5.2 0.03  1.10  3.31   562.   0.
  27.00  2.51  2.51     2332.      1552.      3884.    23.16    15.41    38.56
   0.359    0.239    0.598      21.209       0.064         3.591         0.979
  VACA  TSHBO0632102020202 01              BA2: 5.2 0.23  1.10  4.65   200.   0.
  32.30  1.54  1.54      695.       424.      1119.     7.96     4.85    12.81
   0.904    0.551    1.454       7.048       0.030         1.193         0.325
Unscrubbed Coal                  4
  VACA  TCOLU0631041050710 01              BA2: 5.2 0.55  1.10  5.17    74.   0.
  11.70  1.54  1.54      307.       204.       511.     3.19     2.12     5.32
   0.882    0.586    1.468       2.925       0.014         0.495         0.135
```

VACA TCOLU0631102050710 01 BA2: 5.2 0.11 0.12 5.17 55. 0.
11.70 1.54 1.54 228. 181. 410. 2.05 1.63 3.69
0.113 0.090 0.203 0.223 0.010 0.343 0.094
VACANCTCOLU0631102020110 01 BA2: 5.2 0.46 1.10 3.31 98. 0.
32.00 1.54 1.54 261. 208. 469. 2.72 2.16 4.88
0.625 0.497 1.122 2.683 0.008 0.454 0.124
VACANCTCOLU0631102020210 01 BA2: 5.2 0.40 1.10 4.65 189. 0.
32.00 1.54 1.54 504. 400. 905. 5.24 4.16 9.41
1.049 0.833 1.882 5.174 0.022 0.876 0.239
VACAVATCOLU0331092050710 01 BA2: 5.2 0.38 1.10 5.17 57. 0.
11.70 1.54 1.54 198. 157. 356. 2.06 1.64 3.70
0.388 0.309 0.697 2.034 0.010 0.344 0.094
VACANCTOLBU0632101020210 01 BA2: 5.2 0.63 1.10 4.65 97. 0.
32.00 0.00 1.54 0. 143. 143. 0.00 1.62 1.62
0.000 0.507 0.507 0.889 0.004 0.150 0.041
VACANCTOLBU0632102020110 01 BA2: 5.2 0.44 1.10 3.31 79. 0.
32.00 1.54 1.54 211. 167. 378. 2.24 1.78 4.02
0.498 0.396 0.893 2.214 0.007 0.375 0.102
VACAVATOLBU0332092020110 01 BA2: 5.2 0.32 1.10 3.31 100. 0.
32.00 1.54 1.54 121. 212. 333. 1.34 2.35 3.69
0.218 0.382 0.600 2.031 0.006 0.344 0.094
VACAVATOLBU0332092020110 01 BD1: 5.1 0.32 1.50 3.24 100. 0.
32.00 1.54 1.54 146. 0. 146. 1.61 0.00 1.61
0.262 0.000 0.262 1.210 0.003 0.150 0.041
VACAVATOLBU0332092020210 01 BA2: 5.2 0.41 1.10 4.65 71. 0.
32.00 1.54 1.54 189. 150. 340. 2.10 1.67 3.77
0.429 0.341 0.769 2.074 0.009 0.351 0.096
VACANCTSABU0641102020210 01 BA2: 5.2 0.35 1.10 4.65 745. 0.
17.40 1.54 1.54 3092. 2057. 5149. 29.55 19.66 49.20
5.230 3.479 8.709 27.061 0.114 4.582 1.250
VACANCTSBBU0631102020110 01 BA2: 5.2 0.37 1.10 3.31 78. 0.
32.00 1.54 1.54 271. 165. 436. 2.81 1.71 4.52
0.525 0.320 0.845 2.487 0.007 0.421 0.115
VACANCTSBBU0641102020110 01 BA2: 5.2 0.43 1.10 3.31 1880. 0.
27.20 1.54 1.54 108. 72. 181. 1.03 0.68 1.71
0.220 0.146 0.366 0.940 0.003 0.159 0.043
VACANCTSBBU0641102020210 01 BA2: 5.2 0.36 1.10 4.65 106. 0.
32.00 1.54 1.54 369. 225. 593. 3.81 2.32 6.14
0.679 0.414 1.093 3.376 0.014 0.572 0.156
VACA TSCBU0631102020110 01 BD1: 5.1 0.43 1.50 3.24 170. 0.
32.00 1.54 1.54 591. 469. 1060. 6.12 4.86 10.98
1.322 1.050 2.372 8.236 0.018 1.023 0.279
VACA TSCBU0641102020110 01 BD1: 5.1 0.44 1.50 3.24 306. 0.
26.40 1.54 1.54 1270. 845. 2115. 12.73 8.47 21.19
2.825 1.880 4.705 15.896 0.034 1.974 0.538
VACASCTSEBU0641102020110 01 BD1: 5.1 0.33 1.50 3.24 250. 0.
32.00 1.54 1.54 1038. 690. 1728. 10.48 6.97 17.45
1.740 1.157 2.897 13.088 0.028 1.625 0.443
VACASCTSEBU0641102020310 01 BA2: 5.2 0.40 1.10 0.57 432. 0.
32.00 1.54 1.54 1793. 1396. 3189. 17.45 13.59 31.04
3.464 2.698 6.162 17.073 0.009 2.891 0.788
VACANCTSGBU0641102020110 01 BA2: 5.2 0.37 1.10 3.31 275. 0.
32.00 1.54 1.54 1038. 759. 1797. 10.20 7.46 17.67
1.893 1.384 3.277 9.717 0.029 1.645 0.449
VACANCTSGBU0641102020210 01 BA2: 5.2 0.36 1.10 4.65 526. 0.
32.00 1.54 1.54 1829. 1452. 3281. 18.37 14.59 32.96
3.298 2.619 5.917 18.130 0.077 3.070 0.837
VACANCTSGBU0642101020110 01 BA2: 5.2 0.54 1.10 3.31 165. 0.
32.00 1.54 1.54 440. 350. 790. 4.69 3.72 8.41
1.258 0.999 2.257 4.624 0.014 0.783 0.214
VACANCTSGBU0642102020110 01 BA2: 5.2 0.34 1.10 3.31 142. 0.
32.00 1.54 1.54 379. 301. 680. 4.06 3.23 7.29
0.691 0.549 1.240 4.011 0.012 0.679 0.185
VACA TSHBU0631102020110 01 BD1: 5.1 0.37 1.50 3.24 250. 0.
32.00 1.54 1.54 1038. 690. 1728. 10.42 6.93 17.35

```
   1.922    1.279    3.201      13.010       0.028         1.615         0.441
  VACA  TSHBU0641102020110 01              BD1: 5.1 0.35  1.50  3.24   174.   0.
  32.00  1.54  1.54      722.       480.      1203.     7.03     4.68    11.71
   1.224    0.814    2.038       8.783       0.019         1.091         0.297
  VACA  TSHBU0641102020210 01              BA2: 5.2 0.36  1.10  4.65   170.   0.
  32.00  1.54  1.54      706.       469.      1175.     7.06     4.69    11.75
   1.277    0.850    2.127       6.462       0.027         1.094         0.298
  VACANCTSKBU0632102020210 01              BA2: 5.2 0.38  1.10  4.65   322.   0.
  32.00  1.54  1.54      599.       682.      1281.     7.04     8.02    15.05
   1.344    1.531    2.875       8.280       0.035         1.402         0.382
  VACANCTSKBU0641102020210 01              BA2: 5.2 0.40  1.10  4.65   266.   0.
  32.00  1.54  1.54      710.       564.      1273.     7.30     5.80    13.11
   1.450    1.152    2.602       7.208       0.030         1.220         0.333
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   701.   0.
 137.70  0.51  0.51     3361.      2538.      5899.    34.15    25.79    59.95
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   854.   0.
 147.10  0.66  0.66     3828.      2913.      6741.    39.85    30.33    70.17
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   854.   0.
 147.10  0.66  0.66     4345.      2769.      7114.    44.82    28.56    73.38
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   909.   0.
 134.20  0.46  0.46     4320.      3074.      7394.    43.49    30.95    74.44
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   915.   0.
 132.10  0.42  0.42     4540.      3232.      7772.    45.48    32.38    77.85
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   904.   0.
 132.10  0.42  0.42     4259.      3316.      7575.    44.58    34.72    79.30
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1140.   0.
  83.40  0.47  0.47     5489.      4006.      9496.    55.36    40.40    95.75
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1100.   0.
  91.60  0.49  0.49     5113.      4035.      9148.    53.56    42.26    95.82
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1100.   0.
  91.60  0.49  0.49     5335.      3708.      9043.    54.62    37.96    92.58
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   854.   0.
 147.10  0.66  0.66     2861.      3133.      5994.    29.61    32.42    62.03
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   891.   0.
 134.20  0.46  0.46     3598.      3268.      6867.    36.23    32.91    69.13
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   940.   0.
  99.90  0.53  0.53     3358.      3452.      6810.    33.99    34.94    68.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1140.   0.
  83.40  0.47  0.47     5059.      3927.      8986.    51.30    39.82    91.11
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   976.   0.
  87.80  0.51  0.51     3613.      3444.      7057.    38.80    36.99    75.79
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   940.   0.
 118.60  0.35  0.35     4671.      2685.      7357.    46.95    26.99    73.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   932.   0.
 118.60  0.35  0.35     3833.      3419.      7252.    38.53    34.36    72.89
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
```

```
  VACA  HYDRO00     000000 00                HYDRO    0.00  0.00  0.00  3799.   0.
  15.20  0.00  0.00     6437.      3139.      9575.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  VACA  CC   0622   000000 00                GAS      0.02  0.00  0.00   450.   0.
  13.90  1.03  1.03      302.       696.       998.     2.27     5.22     7.49
   0.023    0.052    0.075       0.000       0.000         0.397         0.108
  VACANCCC   0613   000000 00                GAS      0.10  0.00  0.00    84.   0.
  19.90  0.00  1.03        0.        14.        14.     0.00     0.16     0.16
   0.000    0.008    0.008       0.000       0.000         0.008         0.002
  VACANCCC   0622   000000 00                GAS      0.02  0.00  0.00   940.   0.
  13.90  1.03  1.03     1292.      1454.      2745.     9.69    10.90    20.59
   0.097    0.109    0.206       0.000       0.000         1.093         0.298
  VACANCCC   0623   000000 00                GAS      0.10  0.00  0.00    68.   0.
  14.90  0.00  1.03        0.        12.        12.     0.00     0.13     0.13
   0.000    0.007    0.007       0.000       0.000         0.007         0.002
  VACAVACC   0322   000000 00                GAS      0.08  0.00  0.00  2336.   0.
  13.90  1.03  1.03      818.      1346.      2164.     6.60    10.87    17.47
   0.254    0.419    0.673       0.000       0.000         0.927         0.253
  VACAVACC   0323   000000 00                GAS      0.12  0.00  0.00   594.   0.
  13.90  0.00  1.03        0.       102.       102.     0.00     1.13     1.13
   0.000    0.067    0.067       0.000       0.000         0.060         0.016
IGCC                          10
Turbine                       11
  VACA  CT   0612   000000 00                GAS      0.10  0.00  0.00    22.   0.
   2.80  0.00  1.03        0.         4.         4.     0.00     0.04     0.04
   0.000    0.002    0.002       0.000       0.000         0.002         0.001
  VACA  CT   0622   000000 00                GAS      0.08  0.00  0.00  1934.   0.
   2.80  0.00  1.03        0.       333.       333.     0.00     3.65     3.65
   0.000    0.148    0.148       0.000       0.000         0.194         0.053
  VACANCCT   0611   000000 00                GAS      0.10  0.00  0.00     1.   0.
   2.80  1.03  1.03        0.         1.         1.     0.00     0.00     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACANCCT   0622   000000 00                GAS      0.08  0.00  0.00  3047.   0.
   2.80  1.03  1.03      310.       850.      1160.     3.39     9.29    12.67
   0.136    0.371    0.507       0.000       0.000         0.673         0.183
  VACAVACT   0312   000000 00                GAS      0.10  0.00  0.00    28.   0.
   2.80  1.03  1.03        6.        14.        21.     0.06     0.14     0.20
   0.003    0.007    0.010       0.000       0.000         0.011         0.003
  VACAVACT   0322   000000 00                GAS      0.09  0.00  0.00  1647.   0.
   2.80  0.00  1.03        0.       284.       284.     0.00     3.17     3.17
   0.000    0.140    0.140       0.000       0.000         0.168         0.046
Biomass                       12
  VACA  BIOMS00  50 000000 00                B1-: 0.6 0.02  0.08  0.57    47.   0.
  44.80  5.36  5.36      204.       157.       361.     1.88     1.45     3.33
   0.019    0.015    0.033       0.133       0.001         0.000         0.000
Geothermal                    13
Landfill Gas                  14
  VACA  LFGAS00     000000 00                WASTE    0.25  0.00  0.00    25.   0.
  78.60 10.48 10.48      112.        85.       197.     1.53     1.16     2.69
   0.188    0.143    0.331       0.000       0.000         0.000         0.000
Wind                          15
  VACA  WIND 00     000000 00                NONE     0.00  0.00 71.00    14.   0.
  26.40  0.00  0.00       20.        11.        31.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
  VACA  OTHER00     000000 00                NONE     0.00  0.00 71.00   140.   0.
 103.60  0.00  0.00      617.       487.      1104.     6.79     5.35    12.14
   0.000    0.000    0.000       0.000       0.431         0.000         0.000
Fossil_Other                  19
Pump Storage                  20
  VACA  PUMPS00     000000 00                NONE     0.00  0.00 71.00  4295.   0.
   6.50  0.00  0.00     1953.      1410.      3363.     0.00     0.00     0.00
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                    21
Cgn_Coal                        22
  VACA  CGCOU0631102050710 01              BA2: 5.2 0.35  1.10  5.17    35.   0.
  11.70  1.54  1.54      142.       114.       256.     1.14     0.92     2.05
   0.200    0.161    0.361       1.129       0.005         0.191         0.052
  VACANCCGCOU0611102050310 01              BA2: 5.2 0.39  1.10  0.57    65.   0.
  17.40  1.54  1.54      263.       212.       475.     2.34     1.89     4.23
   0.451    0.364    0.814       2.327       0.001         0.394         0.107
  VACANCCGCOU0611102050710 01              BA2: 5.2 0.39  1.10  5.17    21.   0.
  28.70  1.54  1.54       85.        69.       154.     0.78     0.63     1.41
   0.150    0.121    0.271       0.776       0.004         0.131         0.036
  VACANCCGCOU0631102050310 01              BA2: 5.2 0.39  1.10  0.57   135.   0.
  17.40  1.54  1.54      546.       441.       987.     4.86     3.92     8.79
   0.936    0.755    1.692       4.833       0.002         0.818         0.223
  VACANCCGCOU0631102050710 01              BA2: 5.2 0.39  1.10  5.17   161.   0.
  13.60  1.54  1.54      652.       526.      1178.     5.80     4.68    10.48
   1.116    0.901    2.017       5.764       0.027         0.976         0.266
  VACAVACGCOU0311092050310 01              BA2: 5.2 0.38  1.10  0.57    49.   0.
  17.40  1.54  1.54      198.       160.       358.     1.77     1.42     3.19
   0.333    0.269    0.601       1.754       0.001         0.297         0.081
  VACAVACGCOU0331092050710 01              BA2: 5.2 0.38  1.10  5.17   363.   0.
  11.70  1.54  1.54     1469.      1186.      2655.    11.93     9.63    21.57
   2.250    1.816    4.065      11.861       0.056         2.008         0.548
  VACAVACGCOU0341092050710 01              BA2: 5.2 0.38  1.10  5.17   199.   0.
  11.70  1.54  1.54      675.       545.      1219.     6.89     5.56    12.44
   1.298    1.048    2.346       6.844       0.032         1.159         0.316
  VACAVACGCOS0331092050304 01              BE2:10.4 0.38  0.22  4.18    78.   0.
  35.60  2.94  2.94      316.       255.       571.     2.81     2.27     5.08
   0.530    0.427    0.957       0.559       0.011         0.473         0.129
  VACANCCGCOD0631102050308 01              BD1: 5.1 0.25  0.36  2.03    52.   0.
  23.30  3.84  3.84      210.       170.       380.     2.06     1.66     3.72
   0.257    0.207    0.464       0.669       0.004         0.346         0.094
Cgn_Gas                         23
  VACANCCGCT 0612   000000 00              GAS      0.11  0.00  0.00     2.   0.
   2.80  1.03  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  VACAVACGCT 0311   000000 00              GAS      0.11  0.00  0.00     7.   0.
   2.80  1.03  1.03        2.         4.         5.     0.01     0.03     0.04
   0.001    0.002    0.003       0.000       0.000         0.002         0.001
  VACAVACGCT 0312   000000 00              GAS      0.11  0.00  0.00    11.   0.
   2.80  1.03  1.03        3.         6.         8.     0.03     0.06     0.09
   0.002    0.003    0.005       0.000       0.000         0.005         0.001
  VACA  CGCC 0622   000000 00              GAS      0.02  0.00  0.00  1000.   0.
  13.90  1.03  1.03      672.      1547.      2219.     5.04    11.60    16.64
   0.050    0.116    0.166       0.000       0.000         0.883         0.241
  VACA  CGCC 0623   000000 00              GAS      0.11  0.00  0.00   111.   0.
  13.90  1.03  1.03       25.        57.        82.     0.25     0.56     0.81
   0.013    0.030    0.043       0.000       0.000         0.043         0.012
  VACANCCGCC 0623   000000 00              GAS      0.11  0.00  0.00   162.   0.
  13.90  1.03  1.03       36.        83.       120.     0.36     0.83     1.19
   0.020    0.045    0.065       0.000       0.000         0.063         0.017
  VACAVACGCC 0322   000000 00              GAS      0.12  0.00  0.00   288.   0.
  13.90  1.03  1.03      581.       445.      1026.     4.17     3.20     7.36
   0.248    0.190    0.438       0.000       0.000         0.391         0.107
  VACAVACGCC 0323   000000 00              GAS      0.12  0.00  0.00    91.   0.
  13.90  1.03  1.03       20.        47.        67.     0.21     0.48     0.68
   0.012    0.028    0.041       0.000       0.000         0.036         0.010
Cgn_Oil                         24
Cgn_Other                       25
  VACA  CGBIO00  50 000000 00              B1-: 0.6 0.02  0.08  0.57    34.   0.
  44.80  5.36  5.36      147.       114.       261.     1.26     0.97     2.23
   0.013    0.010    0.022       0.089       0.001         0.000         0.000
  VACA  CGOTH00     000000 00              NONE     0.00  0.00 71.00    10.   0.
 103.60  0.00  0.00       43.        33.        77.     0.18     0.14     0.32
```

```
   0.000    0.000    0.000       0.000       0.011         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
  VACANCTSABC0641101020201 01     ML02     BD1: 5.1 0.06  0.06  0.51   416.  27.
  33.49  3.47  3.47     1726.      1371.      3097.    16.69    13.26    29.94
   0.492    0.391    0.883       0.898       0.008         2.789         0.761
  VACANCTSDBC0641101020101 01     LO02     BF2:11.1 0.06  0.15  1.11  1086.  20.
  34.18  3.83  3.83     4508.      3580.      8088.    41.52    32.97    74.49
   1.142    0.907    2.049       5.587       0.041         6.937         1.892
  VACANCTSDBC0641101020101 01     LD02     BD1: 5.1 0.06  0.15  3.24  1107.  15.
  31.08  4.35  4.35     4593.      3648.      8241.    42.30    33.60    75.90
   1.163    0.924    2.087       5.693       0.123         7.068         1.928
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  VACANCTSGBU0641101020110 01     SCR2     BA2: 5.2 0.06  1.10  3.31   165.  11.
  32.60  2.57  2.57      574.       456.      1029.     5.98     4.75    10.72
   0.182    0.145    0.327       5.897       0.018         0.998         0.272
Ret.ExistScrub & SCR           41
  VACA  TSXBS0641101020103 01     SCR2     BD1: 5.1 0.06  0.14  0.51   270.   9.
  36.10  3.90  3.90     1121.       890.      2011.    11.07     8.79    19.86
   0.315    0.251    0.566       1.400       0.005         1.850         0.504
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  VACANCTSBBU0641102020110 01     RL02     BD1: 5.1 0.05  0.06  0.51  1815.  34.
  37.88  3.42  3.42     7532.      5982.     13515.    72.79    57.81   130.59
   1.820    1.445    3.265       3.918       0.033        12.161         3.317
  VACANCTSDBU0641102020110 01     RL02     BD1: 5.1 0.05  0.06  0.51  2046.  29.
  37.91  3.36  3.36     8492.      6744.     15236.    78.62    62.44   141.06
   1.965    1.561    3.526       4.232       0.036        13.135         3.582
  VACANCTSGBU0641101020210 01     SL01     BD1: 5.1 0.05  0.06  0.51   259.  34.
  43.39  3.50  3.50     1077.       855.      1932.    10.96     8.71    19.67
   0.285    0.226    0.511       0.590       0.005         1.832         0.500
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
```

```
Ret.O/G SNCR                    66
Ret.Nuclear (age 30+10 yrs)     67
Ret.Nuclear (age 40+20 yrs)     68
Ret. Biomass Cofiring           69
CT Early Retirement             70
CC Early Retirement             71
O/G Early Retirement            72
Coal Early Retirement           73
Nuke Early Retirement           74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: TVA      (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
  TVA KYTSYBA0641201010105 01              BG1: 8.0 0.09  0.25  0.80  1192.   0.
  43.50  3.91  3.91     4947.      3929.      8876.    49.20    39.08    88.28
   2.140    1.700    3.840      11.035       0.035         8.221         2.242
  TVA   TSXBA0641221020105 01              BG1: 8.0 0.06  0.25  0.80  2448.   0.
  43.30  3.91  3.91    10160.      8069.     18229.    98.79    78.46   177.25
   2.816    2.236    5.052      22.157       0.071        16.506         4.502
  TVA   TSXBA0641222020105 01              BG1: 8.0 0.04  0.25  0.80   477.   0.
  43.50  3.91  3.91     1980.      1572.      3552.    19.48    15.47    34.96
   0.370    0.294    0.664       4.370       0.014         3.255         0.888
  TVA   TSXBA0641222020705 01              BG1: 8.0 0.04  0.25  0.80   467.   0.
  43.50  3.91  3.91     1938.      1539.      3477.    19.19    15.24    34.42
   0.345    0.274    0.620       4.303       0.014         3.206         0.874
  TVA MSTCOLA1641242020105 01              BG1: 8.0 0.11  0.25  0.80   440.   0.
  23.60  3.91  3.91     1826.      1450.      3276.    16.43    13.05    29.49
   0.904    0.718    1.622       3.686       0.012         2.746         0.749
  TVA KYTSEBA0641201010105 01              BG1: 8.0 0.10  0.25  0.80   977.   0.
  43.30  3.91  3.91     4055.      3220.      7275.    40.83    32.43    73.27
   1.960    1.557    3.517       9.158       0.029         6.823         1.861
Scrubbed Coal                  2
  TVA   TSWBS0642202030303 01              BG1: 8.0 0.45  0.60  0.40   124.   0.
  23.10  2.94  2.94      515.       409.       923.     5.48     4.35     9.83
   1.222    0.971    2.192       2.950       0.002         0.916         0.250
Unscrubbed Coal_NOx            3
  TVA   TSEBC0641221010101 01              BB2: 4.1 0.09  1.00  2.62   744.   0.
  32.50  2.51  2.51     3088.      2452.      5540.    29.85    23.70    53.55
   1.313    1.043    2.356      26.775       0.070         4.987         1.360
  TVA   TSCBC0641212020201 01              BD1: 5.1 0.04  1.50  4.56  1434.   0.
  32.60  2.51  2.51     5951.      4727.     10678.    58.15    46.18   104.33
   1.047    0.831    1.878      78.251       0.238         9.716         2.650
Unscrubbed Coal                4
  TVA   TSABU0641202020310 01              BB2: 4.1 0.39  1.00  0.45  1206.   0.
```

```
  32.00  1.54  1.54     5005.      3975.      8980.    50.44    40.06    90.49
   9.860    7.831   17.692      45.247       0.020         8.427         2.298
  TVA   TSBBU0641212020110 01              BA2: 5.2 0.39  1.10  3.31   976.   0.
  32.00  1.54  1.54     4051.      3217.      7268.    38.66    30.70    69.36
   7.616    6.049   13.664      38.149       0.115         6.459         1.762
  TVA   TSCBU0641212020210 01              BD1: 5.1 0.39  1.50  4.56   704.   0.
  32.00  1.54  1.54     2922.      2320.      5242.    27.80    22.08    49.87
   5.420    4.305    9.725      37.406       0.114         4.644         1.267
  TVA   TSDBU0641222020110 01              BB2: 4.1 0.46  1.00  2.62   564.   0.
  32.00  1.54  1.54     2341.      1557.      3898.    24.52    16.31    40.83
   5.689    3.785    9.474      20.417       0.054         3.803         1.037
  TVA   TSDBU0642222020210 01              BB1: 3.4 0.31  1.00  3.07   642.   0.
  32.00  1.54  1.54     2664.      1773.      4437.    30.45    20.26    50.70
   4.719    3.140    7.859      25.351       0.078         4.721         1.288
  TVA   TSGBU0641222020110 01              BB2: 4.1 0.37  1.00  2.62   222.   0.
  32.00  1.54  1.54      921.       732.      1653.     9.75     7.75    17.50
   1.819    1.445    3.263       8.749       0.023         1.629         0.444
  TVA   TSGBU0642222020110 01              BB2: 4.1 0.38  1.00  2.62   444.   0.
  32.00  1.54  1.54     1843.      1226.      3069.    20.05    13.34    33.39
   3.769    2.508    6.277      16.693       0.044         3.109         0.848
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  2429.   0.
 109.50  0.32  0.32     9322.      8687.     18010.    97.23    90.61   187.84
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1244.   0.
 109.50  0.32  0.32     6153.      4353.     10506.    64.17    45.40   109.58
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1140.   0.
  83.70  0.37  0.37     5634.      3981.      9615.    57.31    40.49    97.80
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1144.   0.
  99.20  0.57  0.57     5772.      3709.      9482.    62.00    39.84   101.83
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1147.   0.
  83.70  0.37  0.37     4755.      4010.      8764.    48.36    40.79    89.15
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  TVA   HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  3934.   0.
  15.40  0.00  0.00    11469.      6255.     17724.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  TVA   CC   0622   000000 00              GAS      0.02  0.00  0.00    79.   0.
  13.90  1.03  1.03      159.       122.       281.     1.19     0.92     2.11
   0.012    0.009    0.021       0.000       0.000         0.112         0.031
  TVA MSCC   1622   000000 00              GAS      0.02  0.00  0.00  2500.   0.
  13.90  1.03  1.03     1680.      1445.      3125.    12.60    10.83    23.44
   0.126    0.108    0.234       0.000       0.000         1.244         0.339
IGCC                           10
Turbine                        11
  TVA   CT   0612   000000 00              GAS      0.08  0.00  0.00     4.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA MSCT   1612   000000 00              GAS      0.08  0.00  0.00    20.   0.
   2.80  0.00  1.03        0.         3.         3.     0.00     0.04     0.04
   0.000    0.002    0.002       0.000       0.000         0.002         0.001
  TVA MSCT   1622   000000 00              GAS      0.08  0.00  0.00  1903.   0.
   2.80  0.00  1.03        0.       261.       261.     0.00     2.85     2.85
   0.000    0.114    0.114       0.000       0.000         0.151         0.041
Biomass                        12
  TVA   BIOMS00  50 000000 00              B1-: 0.6 0.02  0.08  0.57     1.   0.
  44.80  5.36  5.36        4.         3.         8.     0.04     0.03     0.07
   0.000    0.000    0.001       0.003       0.000         0.000         0.000
Geothermal                     13
```

```
Landfill Gas                    14
  TVA   LFGAS00     000000 00              WASTE    0.25  0.00  0.00     2.   0.
  78.60 10.48 10.48        9.         7.        16.     0.12     0.09     0.22
   0.015    0.011    0.026       0.000       0.000         0.000         0.000
Wind                            15
  TVA   WIND 00     000000 00              NONE     0.00  0.00 71.00     2.   0.
  26.40  0.00  0.00        2.         1.         3.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  TVA   OTHER00     000000 00              NONE     0.00  0.00  0.00    12.   0.
 103.60  0.00  0.00       53.        42.        95.     0.58     0.46     1.04
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
  TVA   PUMPS00     000000 00              NONE     0.00  0.00 71.00  1532.   0.
   6.50  0.00  0.00      316.       588.       904.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                    21
Cgn_Coal                        22
Cgn_Gas                         23
  TVA   CGCC 0622   000000 00              GAS      0.02  0.00  0.00  1290.   0.
  13.90  1.03  1.03      901.       664.      1565.     6.75     4.98    11.74
   0.068    0.050    0.117       0.000       0.000         0.623         0.170
Cgn_Oil                         24
Cgn_Other                       25
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
  TVA   TSCBC0641212020101 01     LO01     BG1: 8.0 0.04  0.25  0.80   861.  18.
  39.90  3.81  3.81     3571.      2836.      6408.    32.46    25.78    58.25
   0.601    0.477    1.078       7.281       0.023         5.424         1.479
  TVA   TSLSC0641222020101 01     LO01     BG1: 8.0 0.05  0.25  0.80   457.  25.
  41.90  3.92  3.92     1897.      1507.      3404.    19.20    15.25    34.46
   0.432    0.343    0.775       4.307       0.014         3.209         0.875
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
Ret.ExistScrub & SCR            41
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
  TVA   TSLSU0641222020110 01     RL01     BF1: 6.8 0.05  0.12  0.68   697.  42.
  45.49  3.58  3.58     2893.      2298.      5190.    30.21    23.99    54.20
   0.755    0.600    1.355       3.252       0.019         5.047         1.376
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
Ret.ExistScrub+GasR             47
Ret.GasReburn+Scrub             48
Ret.ACI                         49
Ret.ExistScrub&ACI              50
Ret.ExistSCR&ACI                51
Ret.ExistSNCR&ACI               52
Ret.ACI & SCR                   53
Ret.ExistScrub&ACI&SCR          54
```

```
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: SOU      (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  SOU   TSXBS0642112020103 01              BE1: 6.1 0.34  0.09  2.07   102.   0.
  43.00  2.94  2.94      423.       336.       760.     4.90     3.90     8.80
   0.839    0.666    1.505       0.397       0.009         0.820         0.224
Unscrubbed Coal_NOx            3
  SOU ALTSABC0641232020101 01              BA1: 3.7 0.03  1.10  2.36  1341.   0.
  12.20  2.51  2.51     5565.      4420.      9985.    52.53    41.72    94.24
   0.867    0.688    1.555      51.834       0.111         8.776         2.393
  SOU   TSFBC0641112020101 01              BA2: 5.2 0.05  1.10  3.31   505.   0.
  27.00  2.51  2.51     2096.      1665.      3760.    21.03    16.70    37.73
   0.473    0.376    0.849      20.752       0.062         3.514         0.958
  SOU   TSHBC0641112020101 01              BA2: 5.2 0.04  1.10  3.31  4948.   0.
  26.30  2.51  2.51        0.     16309.     16309.     0.00   153.76   153.76
   0.000    3.306    3.306      84.570       0.254        14.319         3.905
  SOU   TSHBC0641112020101 01              BD1: 5.1 0.04  1.50  3.24  4948.   0.
  26.30  2.51  2.51    20535.         0.     20535.   193.60     0.00   193.60
   4.162    0.000    4.162     145.202       0.314        18.029         4.917
Unscrubbed Coal                4
  SOU   TSABU0641112020110 01              BA2: 5.2 0.42  1.10  3.31  1721.   0.
  28.80  1.54  1.54        0.      5673.      5673.     0.00    54.13    54.13
```

```
  0.000   11.422   11.422      29.774       0.090         5.041         1.375
  SOU   TSABU0641112020110 01              BD1: 5.1 0.42  1.50  3.24  1721.   0.
  28.80  1.54  1.54     7142.         0.      7142.    68.16     0.00    68.16
  14.382    0.000   14.382      51.120       0.111         6.347         1.731
  SOU ALTSABU0641232020210 01              BB1: 3.4 0.33  1.00  3.07   669.   0.
  17.40  1.54  1.54     2776.      2205.      4982.    26.20    20.81    47.02
   4.363    3.465    7.828      23.508       0.072         4.378         1.194
  SOU MSTSABU1641242020110 01              BB1: 3.4 0.29  1.00  2.18   536.   0.
  26.40  1.54  1.54     1478.         0.      1478.    14.92     0.00    14.92
   2.193    0.000    2.193       7.459       0.016         1.389         0.379
  SOU MSTSABU1641242020110 01              BB2: 4.1 0.29  1.00  2.62   536.   0.
  26.40  1.54  1.54      746.      1767.      2513.     7.53    17.83    25.36
   1.107    2.621    3.728      12.679       0.033         2.361         0.644
  SOU MSTSABU1641242020210 01              BB1: 3.4 0.33  1.00  3.07   545.   0.
  17.40  1.54  1.54     2262.      1796.      4058.    22.41    17.80    40.21
   3.653    2.901    6.555      20.106       0.062         3.745         1.021
  SOU   TSBBU0632112020110 01              BA2: 5.2 0.35  1.10  3.31   107.   0.
  32.00  1.54  1.54      199.       227.       426.     2.20     2.51     4.71
   0.383    0.437    0.820       2.593       0.008         0.439         0.120
  SOU   TSBBU0641112020110 01              BA2: 5.2 0.38  1.10  3.31   282.   0.
  26.20  1.54  1.54     1170.       930.      2100.    11.83     9.40    21.23
   2.230    1.771    4.001      11.674       0.035         1.977         0.539
  SOU   TSBBU0641242020110 01              BB2: 4.1 0.38  1.00  2.62  1103.   0.
  26.40  1.54  1.54     4578.      3636.      8213.    43.18    34.29    77.47
   8.160    6.481   14.641      38.734       0.102         7.214         1.967
  SOU   TSBBU0641242020210 01              BB1: 3.4 0.38  1.00  3.07   534.   0.
  32.00  1.54  1.54     2216.      1760.      3976.    21.67    17.21    38.88
   4.150    3.296    7.446      19.440       0.060         3.621         0.987
  SOU MSTSBBU1641242020110 01              BB2: 4.1 0.45  1.00  2.62   262.   0.
  26.40  1.54  1.54     1087.       864.      1951.    10.77     8.55    19.32
   2.423    1.924    4.347       9.660       0.025         1.799         0.491
  SOU   TSCBU0641232020210 01              BA1: 3.7 0.42  1.10  3.32  1904.   0.
  29.40  1.54  1.54        0.      2712.      2712.     0.00    25.39    25.39
   0.000    5.370    5.370      13.965       0.042         2.365         0.645
  SOU   TSCBU0641232020210 01              BB1: 3.4 0.42  1.00  3.07  1904.   0.
  29.40  1.54  1.54     7902.      3564.     11466.    73.99    33.37   107.35
  15.648    7.058   22.705      53.677       0.165         9.997         2.726
  SOU ALTSEBU0632232020110 01              BD1: 5.1 0.36  1.50  3.24   135.   0.
  32.00  1.54  1.54      560.       373.       933.     6.59     4.39    10.98
   1.190    0.792    1.982       8.235       0.018         1.022         0.279
  SOU ALTSEBU0641232020210 01              BD1: 5.1 0.36  1.50  4.56   857.   0.
  32.00  1.54  1.54     3557.      2689.      6245.    34.20    25.86    60.06
   6.106    4.615   10.721      45.045       0.137         5.593         1.525
  SOU ALTSEBU0641232020210 01              BA1: 3.7 0.36  1.10  3.32   857.   0.
  32.00  1.54  1.54        0.       136.       136.     0.00     1.31     1.31
   0.000    0.234    0.234       0.721       0.002         0.122         0.033
  SOU ALTSEBU0642232020110 01              BD1: 5.1 0.40  1.50  3.24   224.   0.
  32.00  1.54  1.54      930.       738.      1668.    10.30     8.18    18.48
   2.034    1.616    3.650      13.861       0.030         1.721         0.469
  SOU   TSFBU0641112020110 01              BA2: 5.2 0.36  1.10  3.31  1674.   0.
  29.70  1.54  1.54     6947.      5518.     12465.    69.65    55.32   124.96
  12.536    9.957   22.493      68.729       0.207        11.637         3.174
  SOU   TSFBU0642112020110 01              BA2: 5.2 0.37  1.10  3.31   320.   0.
  32.00  0.00  1.54        0.       624.       624.     0.00     7.07     7.07
   0.000    1.318    1.318       3.888       0.012         0.658         0.180
  SOU   TSFBU0642112020110 01              BD1: 5.1 0.37  1.50  3.24   320.   0.
  32.00  0.00  1.54        0.        18.        18.     0.00     0.20     0.20
   0.000    0.038    0.038       0.151       0.000         0.019         0.005
  SOU   TSHBU0632222020210 01              BB1: 3.4 0.35  1.00  3.07    80.   0.
  26.40  1.54  1.54      332.       264.       596.     3.77     3.00     6.77
   0.656    0.521    1.177       3.384       0.010         0.630         0.172
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  SOU   NUKE 00    7000000 00              NUC      0.00  0.00  0.00   865.   0.
```

```
 149.60  0.69  0.69     4060.      2963.      7024.    44.23    32.28    76.51
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00               NUC      0.00  0.00  0.00  1148.   0.
  78.50  0.38  0.38     5698.      3929.      9627.    61.95    42.72   104.67
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00               NUC      0.00  0.00  0.00  1149.   0.
  78.50  0.38  0.38     5543.      4215.      9758.    60.27    45.83   106.09
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00               NUC      0.00  0.00  0.00   851.   0.
 150.80  0.65  0.65     3124.      2831.      5956.    34.37    31.14    65.51
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00               NUC      0.00  0.00  0.00   860.   0.
 100.80  0.65  0.65     3623.      3155.      6777.    39.85    34.70    74.55
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00               NUC      0.00  0.00  0.00   879.   0.
 149.60  0.69  0.69     3933.      2979.      6912.    43.19    32.72    75.91
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  SOU   HYDRO00     000000 00               HYDRO    0.00  0.00  0.00  3305.   0.
  14.90  0.00  0.00     6138.      2706.      8844.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  SOU   CC   0612   000000 00               GAS      0.02  0.00  0.00    27.   0.
  13.90  1.03  1.03      121.        70.       191.     0.91     0.52     1.43
   0.009    0.005    0.014       0.000       0.000         0.076         0.021
  SOU   CC   0613   000000 00               GAS      0.10  0.00  0.00    43.   0.
  19.90  0.00  1.03        0.         7.         7.     0.00     0.08     0.08
   0.000    0.004    0.004       0.000       0.000         0.004         0.001
  SOU   CC   0622   000000 00               GAS      0.02  0.00  0.00 10500.   0.
  13.90  1.03  1.03    31171.     20072.     51243.   234.10   150.74   384.84
   2.458    1.583    4.041       0.000       0.000        20.423         5.570
  SOU FLCC   1522   000000 00               GAS      0.02  0.00  0.00   500.   0.
  13.90  1.03  1.03     2241.      1289.      3530.    16.81     9.67    26.48
   0.168    0.097    0.265       0.000       0.000         1.405         0.383
  SOU MSCC   1622   000000 00               GAS      0.02  0.00  0.00  1000.   0.
  13.90  1.03  1.03     3361.      2578.      5940.    25.21    19.34    44.55
   0.252    0.193    0.445       0.000       0.000         2.364         0.645
IGCC                            10
Turbine                         11
  SOU   CT   0611   000000 00               GAS      0.10  0.00  0.00     3.   0.
   7.80  0.00  1.03        0.         2.         2.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  SOU   CT   0622   000000 00               GAS      0.08  0.00  0.00  7042.   0.
   2.80  0.00  1.03        0.      2006.      2006.     0.00    21.89    21.89
   0.000    0.875    0.875       0.000       0.000         1.161         0.317
  SOU MSCT   1622   000000 00               GAS      0.08  0.00  0.00   640.   0.
   2.80  0.00  1.03        0.       110.       110.     0.00     1.20     1.20
   0.000    0.048    0.048       0.000       0.000         0.064         0.017
Biomass                         12
Geothermal                      13
Landfill Gas                    14
  SOU   LFGAS00     000000 00               WASTE    0.25  0.00  0.00     9.   0.
  78.60 10.48 10.48       40.        31.        71.     0.55     0.42     0.97
   0.068    0.052    0.119       0.000       0.000         0.000         0.000
Wind                            15
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
Fossil_Other                    19
Pump Storage                    20
  SOU   PUMPS00     000000 00               NONE     0.00  0.00 71.00  1416.   0.
   6.50  0.00  0.00        0.       635.       635.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                    21
Cgn_Coal                        22
```

```
  SOU   CGCOU0611112050710 01              BA2: 5.2 0.40  1.10  5.17     1.   0.
  14.60  1.54  1.54        4.         3.         7.     0.04     0.03     0.07
   0.007    0.006    0.013       0.036       0.000         0.006         0.002
Cgn_Gas                         23
  SOU   CGCT 0612   000000 00              GAS      0.10  0.00  0.00     4.   0.
   8.80  0.00  1.03        0.         2.         2.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  SOU MSCGCT 1622   000000 00              GAS      0.05  0.00  0.00    70.   0.
   2.80  0.00  1.03        0.        36.        36.     0.00     0.36     0.36
   0.000    0.008    0.008       0.000       0.000         0.019         0.005
  SOU   CGCC 0612   000000 00              GAS      0.10  0.00  0.00     5.   0.
  13.90  0.00  1.03        0.         3.         3.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  SOU   CGCC 0622   000000 00              GAS      0.04  0.00  0.00  1604.   0.
  13.90  1.03  1.03     1078.      2481.      3559.     8.26    19.01    27.26
   0.145    0.333    0.477       0.000       0.000         1.447         0.395
  SOU FLCGCC 1522   000000 00              GAS      0.02  0.00  0.00   240.   0.
  13.90  1.03  1.03      834.       619.      1453.     6.25     4.64    10.89
   0.063    0.046    0.109       0.000       0.000         0.578         0.158
Cgn_Oil                         24
Cgn_Other                       25
  SOU   CGBIO00  50 000000 00              B1-: 0.6 0.02  0.08  0.57     5.   0.
  44.80  5.36  5.36       22.        17.        38.     0.19     0.14     0.33
   0.002    0.001    0.003       0.013       0.000         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
  SOU   TSKBC0641232020101 01     LO01     BG1: 8.0 0.04  0.25  0.80   722.  20.
  34.78  3.88  3.88        0.      1577.      1577.     0.00    15.38    15.38
   0.000    0.308    0.308       1.923       0.006         1.432         0.391
  SOU   TSKBC0641232020101 01     LO01     BF3:18.7 0.04  0.15  1.87   722.  20.
  34.78  3.88  3.88     2994.       801.      3796.    29.21     7.82    37.03
   0.584    0.156    0.741       2.777       0.035         3.448         0.940
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
  SOU ALTSABU0641231020210 01     SCR2     BA1: 3.7 0.06  1.10  3.32   670.   7.
  22.80  2.40  2.40     2781.      2208.      4989.    26.24    20.84    47.09
   0.827    0.657    1.483      25.898       0.078         4.385         1.196
  SOU MSTSBBU1641241020110 01     SCR2     BB2: 4.1 0.06  1.00  2.62   512.   7.
  26.80  2.43  2.43     2125.      1688.      3813.    20.95    16.64    37.60
   0.608    0.483    1.090      18.798       0.049         3.501         0.955
Ret.ExistScrub & SCR            41
  SOU   TSXBS0641222020203 01     SCR1     BG1: 8.0 0.05  0.85  0.80   472.  10.
  41.10  3.92  3.92     1959.      1556.      3515.    20.56    16.33    36.89
   0.514    0.408    0.922      15.771       0.015         3.435         0.937
  SOU MSTSXBS1641291020203 01     SCR2     BD1: 5.1 0.05  0.07  0.51   200.  10.
  41.20  3.94  3.94      830.       659.      1489.     8.72     6.92    15.64
   0.218    0.173    0.391       0.539       0.004         1.456         0.397
  SOU MSTSXBS1641292020203 01     SCR1     BD1: 5.1 0.05  0.07  0.51   200.  10.
  41.20  3.94  3.94      830.       659.      1489.     8.72     6.92    15.64
   0.218    0.173    0.391       0.539       0.004         1.456         0.397
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
  SOU   TSESU0641111020210 01     SO01     BF2:11.1 0.06  0.15  1.11    84.  25.
```

```
  24.97  3.76  3.76      348.       276.       624.     3.42     2.72     6.14
   0.096    0.076    0.172       0.461       0.003         0.572         0.156
  SOU   TSESU0641112020110 01     RO01     BF2:11.1 0.05  0.15  1.11  1652.  25.
  22.11  3.79  3.79     6854.      5444.     12298.    69.60    55.28   124.88
   1.740    1.382    3.122       9.366       0.069        11.629         3.171
  SOU   TSESU0641112020210 01     RO01     BF2:11.1 0.05  0.15  1.11   815.  25.
  24.97  3.77  3.77     3380.      2685.      6065.    33.64    26.72    60.36
   0.841    0.668    1.509       4.527       0.033         5.621         1.533
  SOU   TSESU0641111020210 01     SCR2LO01 BF2:11.1 0.06  0.15  1.11   732.  25.
  24.98  3.76  3.76     3037.      2412.      5449.    29.90    23.75    53.65
   0.837    0.665    1.502       4.024       0.030         4.996         1.363
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: ENTG     (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
```

```
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
  ENTGMOTSEBC0541251010101 01              BB2: 4.1 0.07  0.47  2.62  1160.   0.
  27.00  2.51  2.51     4814.      3824.      8638.    48.38    38.43    86.81
   1.766    1.403    3.169      20.400       0.114         8.084         2.205
Unscrubbed Coal                4
  ENTG  TCOLU1041292050210 01              BB1: 3.4 0.28  1.00  3.41   550.   0.
  17.40  1.54  1.54     2283.      1813.      4095.    23.74    18.85    42.59
   3.312    2.630    5.942      21.296       0.073         3.966         1.082
  ENTG  TSASU1041292020110 01              SB2: 6.5 0.31  0.73  6.29  4252.   0.
  17.40  1.54  1.54    17646.     14015.     31662.   180.06   143.01   323.07
  28.180   22.381   50.561     118.569       1.015        31.170         8.501
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  ENTG  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1141.   0.
 131.60  0.67  0.67     5532.      3951.      9483.    58.30    41.64    99.94
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ENTG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1231.   0.
 104.00  0.53  0.53     6181.      4258.     10439.    68.93    47.48   116.41
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ENTG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   893.   0.
 166.00  0.56  0.56     3924.      3200.      7125.    43.48    35.46    78.94
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ENTG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   996.   0.
 103.40  0.72  0.72     4398.      3453.      7850.    50.20    39.41    89.60
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ENTG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   945.   0.
 166.00  0.56  0.56     3776.      2832.      6608.    43.22    32.41    75.63
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  ENTG  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   336.   0.
  14.20  0.00  0.00      646.       474.      1120.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  ENTG  CC   1022   000000 00              GAS      0.02  0.00  0.00  6669.   0.
  13.90  1.03  1.03     5062.     10315.     15376.    37.96    77.36   115.32
   0.380    0.774    1.153       0.000       0.000         6.120         1.669
  ENTG  CC   1023   000000 00              GAS      0.08  0.00  0.00   203.   0.
  19.90  0.00  1.03        0.        35.        35.     0.00     0.31     0.31
   0.000    0.013    0.013       0.000       0.000         0.017         0.005
  ENTGMSCC   1622   000000 00              GAS      0.02  0.00  0.00  3835.   0.
  13.90  1.03  1.03     3029.      9008.     12037.    22.71    67.56    90.27
   0.227    0.676    0.903       0.000       0.000         4.791         1.307
  ENTGMOCC   0522   000000 00              GAS      0.02  0.00  0.00   225.   0.
  13.90  0.00  1.03        0.       116.       116.     0.00     0.87     0.87
   0.000    0.009    0.009       0.000       0.000         0.046         0.013
  ENTGTXCC   2322   000000 00              GAS      0.02  0.00  0.00   911.   0.
  13.90  0.00  1.03        0.       469.       469.     0.00     3.52     3.52
   0.000    0.035    0.035       0.000       0.000         0.187         0.051
IGCC                          10
Turbine                       11
Biomass                       12
  ENTG  BIOMS00  51 000000 00              B1-: 0.6 0.02  0.08  0.57    10.   0.
  44.80  5.36  5.36       43.        33.        77.     0.40     0.31     0.71
   0.004    0.003    0.007       0.028       0.000         0.000         0.000
Geothermal                    13
Landfill Gas                  14
  ENTG  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     6.   0.
  78.60 10.48 10.48       27.        20.        47.     0.37     0.28     0.65
   0.045    0.034    0.079       0.000       0.000         0.000         0.000
Wind                          15
  ENTG  WIND 00     000000 00              NONE     0.00  0.00 71.00    57.   0.
  26.40  0.00  0.00       57.        32.        88.     0.00     0.00     0.00
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  ENTG  OTHER00     000000 00              NONE     0.00  0.00  0.00    31.   0.
 103.60  0.00  0.00      137.       108.       244.     1.50     1.19     2.69
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
  ENTG  CGCT 1012   000000 00              GAS      0.12  0.00  0.00    12.   0.
   2.80  0.00  1.03        0.         2.         2.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  ENTGTXCGCT 2712   000000 00              GAS      0.10  0.00  0.00     1.   0.
   2.80  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ENTG  CGCC 1012   000000 00              GAS      0.09  0.00  0.00    52.   0.
  13.90  0.00  1.03        0.        27.        27.     0.00     0.21     0.21
   0.000    0.010    0.010       0.000       0.000         0.011         0.003
  ENTG  CGCC 1013   000000 00              GAS      0.09  0.00  0.00    13.   0.
  14.50  0.00  1.03        0.         2.         2.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  ENTG  CGCC 1022   000000 00              GAS      0.02  0.00  0.00  1891.   0.
  13.90  1.03  1.03     6356.      1969.      8325.    47.67    14.76    62.44
   0.477    0.148    0.624       0.000       0.000         3.314         0.904
  ENTGTXCGCC 1921   000000 00              GAS      0.13  0.00  0.00   440.   0.
  14.90  0.00  1.03        0.        72.        72.     0.00     0.39     0.39
   0.000    0.026    0.026       0.000       0.000         0.021         0.006
  ENTGTXCGCC 1922   000000 00              GAS      0.02  0.00  0.00   353.   0.
  13.90  0.00  1.03        0.        60.        60.     0.00     0.45     0.45
   0.000    0.005    0.005       0.000       0.000         0.024         0.007
  ENTGTXCGCC 2712   000000 00              GAS      0.02  0.00  0.00    25.   0.
  13.90  1.03  1.03       84.        64.       148.     0.63     0.48     1.11
   0.006    0.005    0.011       0.000       0.000         0.059         0.016
  ENTGTXCGCC 2722   000000 00              GAS      0.02  0.00  0.00   513.   0.
  13.90  1.03  1.03        4.       264.       268.     0.03     1.98     2.01
   0.000    0.020    0.020       0.000       0.000         0.107         0.029
Cgn_Oil                        24
Cgn_Other                      25
  ENTG  CGBIO00  51 000000 00              B1-: 0.6 0.02  0.08  0.57     8.   0.
  44.80  5.36  5.36       35.        27.        61.     0.30     0.23     0.52
   0.003    0.002    0.005       0.021       0.000         0.000         0.000
  ENTG  CGFWT102    000000 00              WASTE    0.42  0.00 20.87   170.   0.
 103.60  0.00  0.00      760.       580.      1340.     4.52     3.44     7.96
   0.939    0.716    1.656       0.000       0.083         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  ENTGMOTSISU0541271010110 01     SCR2     SB2: 6.5 0.06  0.47  6.29   450.  10.
  29.10  2.52  2.52     1868.      1483.      3351.    18.84    14.96    33.81
   0.537    0.426    0.963       7.945       0.106         3.262         0.890
```

```
Ret.ExistScrub & SCR          41
  ENTGMOTSISS0541272020103 01     SCR1     SB2: 6.5 0.05  0.22  2.20   670.   7.
  36.00  3.80  3.80     2781.      2208.      4989.    27.95    22.19    50.14
   0.699    0.555    1.254       5.616       0.055         4.837         1.319
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  ENTG  TSASU1042292020110 01     RD01     BD1: 5.1 0.05  0.15  3.24   798.  24.
  27.58  4.55  4.55     3311.      2630.      5941.    36.32    28.85    65.17
   0.908    0.721    1.629       4.888       0.106         6.069         1.655
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: SPPN     (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
```

```
  SPPNMOTCOLA0541252020105 01                BG1: 8.0 0.01  0.25  0.80   540.   0.
  23.60  3.91  3.91     2241.      1780.      4021.    20.17    16.02    36.19
   0.111    0.088    0.199       4.524       0.015         3.370         0.919
  SPPNMOTSCSA0541282020306 01                SD2: 6.7 0.03  0.14  5.03   550.   0.
  43.30  3.91  3.91     2283.      1813.      4095.    23.55    18.71    42.26
   0.353    0.281    0.634       2.958       0.106         4.077         1.112
Scrubbed Coal                    2
  SPPNMOTSUBS0541272020103 01                BF1: 6.8 0.30  0.48  2.32   178.   0.
  42.70  2.94  2.94      619.       491.      1110.     6.44     5.11    11.55
   0.965    0.767    1.732       2.754       0.013         1.075         0.293
  SPPN  TSYBS1741281010703 01                BD1: 5.1 0.86  0.09  2.28   682.   0.
  42.70  2.94  2.94     2830.      2248.      5078.    29.87    23.72    53.59
  12.843   10.200   23.042       2.291       0.061         4.990         1.361
  SPPN  TSYBS1741282020703 01                BD1: 5.1 0.40  0.12  2.94   370.   0.
  42.70  2.94  2.94     1536.      1220.      2755.    15.72    12.49    28.21
   3.145    2.498    5.642       1.756       0.041         2.627         0.717
  SPPN  TSYBS1742282020703 01                BD1: 5.1 0.40  0.07  2.94   113.   0.
  43.00  2.94  2.94      469.       312.       781.     5.38     3.58     8.97
   1.077    0.716    1.793       0.309       0.013         0.835         0.228
  SPPN  TSYSS1741282020304 01                SD2: 6.7 0.28  0.11  5.03   331.   0.
  35.60  2.94  2.94     1374.      1091.      2465.    14.18    11.26    25.44
   2.013    1.599    3.612       1.424       0.064         2.454         0.669
  SPPN  TSYSS1742282020103 01                SB2: 6.5 0.40  0.14  5.44  2136.   0.
  40.60  2.94  2.94     8865.      7041.     15905.    97.18    77.19   174.37
  19.437   15.437   34.874      11.857       0.475        16.823         4.588
  SPPNMOTSBSS0542282020103 01                SB2: 6.5 0.30  0.40  5.44   308.   0.
  43.00  2.94  2.94     1071.       850.      1921.    12.00     9.53    21.54
   1.801    1.430    3.231       4.329       0.059         2.078         0.567
  SPPNMOTSDSS0541282020103 01                SB2: 6.5 0.28  0.30  5.44   670.   0.
  40.60  2.94  2.94     2492.      1980.      4472.    24.24    19.25    43.49
   3.357    2.667    6.024       6.437       0.118         4.196         1.144
  SPPN  TSESS1741282020103 01                SB2: 6.5 0.50  0.34  5.44   668.   0.
  42.70  2.94  2.94     2772.      2202.      4974.    29.01    23.04    52.04
   7.252    5.759   13.011       8.926       0.142         5.021         1.369
Unscrubbed Coal_NOx              3
Unscrubbed Coal                  4
  SPPN  TCOLU1731281020310 01                BB2: 4.1 0.84  0.78  0.45    37.   0.
  32.00  1.54  1.54      154.       122.       276.     1.60     1.27     2.87
   0.671    0.533    1.203       1.123       0.001         0.267         0.073
  SPPN  TCOLU1731282020110 01                BB2: 4.1 0.46  0.78  2.62    38.   0.
  32.00  1.54  1.54      158.       125.       283.     1.64     1.30     2.94
   0.377    0.300    0.677       1.154       0.004         0.274         0.075
  SPPNMOTCOLU0511252050710 01                BB2: 4.1 0.48  1.00  4.10    43.   0.
  32.00  1.54  1.54      178.       142.       320.     1.86     1.47     3.33
   0.444    0.352    0.796       1.665       0.007         0.310         0.085
  SPPNMOTCOLU0511272050710 01                BB2: 4.1 0.48  1.00  4.10     8.   0.
  32.00  1.54  1.54       33.        26.        60.     0.35     0.27     0.62
   0.083    0.066    0.148       0.310       0.001         0.058         0.016
  SPPN  TOLBU1732282020110 01                BB2: 4.1 0.40  1.00  2.62   144.   0.
  32.00  1.54  1.54      501.       398.       898.     5.94     4.72    10.67
   1.189    0.944    2.133       5.333       0.014         0.993         0.271
  SPPN  TOLBU1742282020110 01                BB2: 4.1 0.40  1.00  2.62   148.   0.
  32.00  1.54  1.54      614.       409.      1023.     6.64     4.42    11.06
   1.329    0.884    2.213       5.532       0.015         1.030         0.281
  SPPNMOTOLBU0511281020110 01                SD2: 6.7 0.63  1.40  6.50    84.   0.
  32.00  1.54  1.54      349.       277.       625.     3.63     2.88     6.51
   1.142    0.907    2.049       4.554       0.021         0.628         0.171
  SPPNMOTOLBU0531281010110 01                BB2: 4.1 0.69  1.00  2.62    53.   0.
  32.00  1.54  1.54      141.       112.       254.     1.50     1.19     2.69
   0.515    0.409    0.924       1.344       0.004         0.250         0.068
  SPPNMOTOLBU0531281020110 01                BB2: 4.1 0.60  1.00  2.62    96.   0.
  32.00  1.54  1.54      256.       203.       459.     2.66     2.12     4.78
   0.803    0.638    1.441       2.389       0.006         0.445         0.121
  SPPNMOTOLBU0531282020110 01                BB2: 4.1 0.42  1.00  2.62    51.   0.
  32.00  1.54  1.54      177.       124.       302.     1.84     1.29     3.14
```

```
   0.384    0.269    0.652       1.568       0.004         0.292         0.080
  SPPNMOTSBSU0542282020110 01              SB2: 6.5 0.30  0.48  6.29   161.   0.
  32.00  1.54  1.54      668.       445.      1113.     7.14     4.75    11.90
   1.072    0.713    1.784       2.879       0.037         1.148         0.313
  SPPN  TSCBU1731282010310 01              BB2: 4.1 0.85  0.70  0.45    55.   0.
  32.00  1.54  1.54      228.       181.       410.     2.33     1.85     4.19
   0.997    0.792    1.790       1.473       0.001         0.390         0.106
  SPPN  TSCBU1732281010110 01              BB2: 4.1 1.01  1.00  2.62    73.   0.
  32.00  1.54  1.54      303.       202.       505.     3.29     2.19     5.48
   1.661    1.105    2.765       2.738       0.007         0.510         0.139
  SPPN  TSCBU1732282020110 01              BB2: 4.1 0.40  1.00  2.62    54.   0.
  32.00  1.54  1.54      188.       114.       302.     2.35     1.43     3.78
   0.469    0.286    0.755       1.888       0.005         0.352         0.096
  SPPN  TSESU1741282020110 01              SB2: 6.5 0.46  0.78  6.29   235.   0.
  17.40  1.54  1.54      975.       775.      1750.    10.11     8.03    18.15
   2.326    1.848    4.174       7.069       0.057         1.751         0.478
  SPPN  TSFBU1742282020110 01              BB2: 4.1 0.50  1.00  2.62   135.   0.
  26.40  1.54  1.54      560.       373.       933.     6.25     4.16    10.40
   1.562    1.039    2.601       5.202       0.014         0.969         0.264
  SPPNMOTSGBU0511271020710 01              BG1: 8.0 0.95  5.00  8.04     6.   0.
  32.00  1.54  1.54       25.        20.        45.     0.26     0.21     0.46
   0.124    0.098    0.222       1.162       0.002         0.043         0.012
  SPPNMOTSLBU0531281020110 01              BB2: 4.1 0.53  1.00  2.62    97.   0.
  26.40  1.54  1.54      337.       206.       543.     3.51     2.14     5.64
   0.929    0.566    1.496       2.822       0.007         0.526         0.143
  SPPNMOTSUBU0541272020110 01              BB2: 4.1 0.30  0.12  2.62   222.   0.
  17.40  1.54  1.54      921.       732.      1653.     9.72     7.72    17.44
   1.473    1.170    2.642       1.081       0.023         1.624         0.443
Oil/Gas Steam                    5
Oil/Gas Steam_Nox                6
Nuclear                          7
  SPPN  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1182.   0.
  92.90  0.56  0.56     5668.      4084.      9752.    55.33    39.87    95.20
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  SPPN  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   333.   0.
  15.10  0.00  0.00      601.       418.      1020.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  SPPNMOCC   0522   000000 00              GAS      0.02  0.00  0.00  1437.   0.
  13.90  1.03  1.03      650.      1690.      2340.     4.88    12.67    17.55
   0.049    0.127    0.176       0.000       0.000         0.931         0.254
IGCC                            10
Turbine                         11
  SPPN  CT   1711   000000 00              GAS      0.10  0.00  0.00    17.   0.
   8.50  0.00  1.03        0.         9.         9.     0.00     0.08     0.08
   0.000    0.004    0.004       0.000       0.000         0.004         0.001
  SPPN  CT   1712   000000 00              GAS      0.10  0.00  0.00   214.   0.
   4.00  0.00  1.03        0.       111.       111.     0.00     1.19     1.19
   0.000    0.060    0.060       0.000       0.000         0.063         0.017
  SPPN  CT   1722   000000 00              GAS      0.09  0.00  0.00   353.   0.
   3.60  0.00  1.03        0.       183.       183.     0.00     2.03     2.03
   0.000    0.092    0.092       0.000       0.000         0.108         0.029
  SPPN  CT   1723   000000 00              GAS      0.11  0.00  0.00   637.   0.
  10.70  0.00  1.03        0.       110.       110.     0.00     1.40     1.40
   0.000    0.075    0.075       0.000       0.000         0.074         0.020
  SPPNMOCT   0511   000000 00              GAS      0.10  0.00  0.00     2.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.001         0.000
  SPPNMOCT   0512   000000 00              GAS      0.11  0.00  0.00   103.   0.
  10.00  0.00  1.03        0.        53.        53.     0.00     0.55     0.55
   0.000    0.030    0.030       0.000       0.000         0.029         0.008
  SPPNMOCT   0522   000000 00              GAS      0.09  0.00  0.00  1320.   0.
   3.70  0.00  1.03        0.       555.       555.     0.00     6.08     6.08
   0.000    0.286    0.286       0.000       0.000         0.323         0.088
```

```
  SPPNMOCT   0523   000000 00              GAS      0.11  0.00  0.00   733.   0.
   9.40  0.00  1.03        0.        92.        92.     0.00     1.18     1.18
   0.000    0.067    0.067       0.000       0.000         0.063         0.017
Biomass                        12
Geothermal                     13
Landfill Gas                   14
Wind                           15
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
Fossil_Other                   19
Pump Storage                   20
  SPPN  PUMPS00     000000 00              NONE     0.00  0.00 71.00   155.   0.
   6.50  0.00  0.00       32.        37.        69.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
  SPPN  CGCT 1712   000000 00              GAS      0.08  0.00  0.00    15.   0.
   2.80  0.00  1.03        0.         8.         8.     0.00     0.08     0.08
   0.000    0.003    0.003       0.000       0.000         0.005         0.001
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  SPPNMOTOLSU0542281010110 01     SCR2     SB2: 6.5 0.06  1.00  6.29   211.  10.
  27.00  2.53  2.53      734.       447.      1181.     8.29     5.05    13.34
   0.236    0.144    0.380       6.670       0.042         1.287         0.351
  SPPNMOTSJBU0541281010110 01     SCR2     BB2: 4.1 0.07  1.00  2.62   390.   8.
  26.80  2.46  2.46     1619.      1100.      2719.    15.70    10.67    26.37
   0.542    0.368    0.910      13.187       0.035         2.456         0.670
Ret.ExistScrub & SCR           41
  SPPNMOTSDSS0541282020103 01     SCR1     SB2: 6.5 0.05  0.30  2.20    69.   7.
  41.00  3.80  3.80      288.       229.       517.     2.80     2.23     5.03
   0.070    0.056    0.126       0.744       0.006         0.485         0.132
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
```

```
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Year: 2010, Region: SPPS     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  SPPS  TSXSS3642282020104 01              SD2: 6.7 0.31  0.19  4.36   520.   0.
  35.60  2.94  2.94     2158.      1714.      3872.    23.20    18.43    41.63
   3.608    2.865    6.473       3.876       0.091         4.016         1.095
Unscrubbed Coal_NOx            3
  SPPS  TSASN3642282020102 01              SB2: 6.5 0.45  0.73  6.29   490.   0.
  17.60  2.45  2.45     2034.      1615.      3649.    21.76    17.28    39.03
   4.938    3.922    8.861      14.247       0.123         3.766         1.027
Unscrubbed Coal                4
  SPPSTXTCOLU3531292050710 01              BB1: 3.4 0.32  1.00  3.41    26.   0.
  22.40  1.54  1.54      108.        86.       194.     1.12     0.89     2.01
   0.181    0.144    0.325       1.007       0.003         0.188         0.051
  SPPS  TSASU3641282020110 01              SB2: 6.5 0.39  0.73  6.29  3838.   0.
  23.00  1.54  1.54    15928.     12651.     28579.   161.43   128.21   289.65
  31.641   25.130   56.771     105.287       0.910        27.945         7.621
  SPPSTXTSASU2341292020210 01              SB2: 6.5 0.27  0.73  6.09  1056.   0.
  24.40  1.54  1.54     1480.      1175.      2655.    15.13    12.02    27.15
   2.035    1.617    3.652       9.924       0.083         2.620         0.714
  SPPSTXTSASU3541292020110 01              SB2: 6.5 0.26  0.61  6.29   346.   0.
  26.40  1.54  1.54     1436.      1140.      2576.    14.25    11.32    25.57
   1.824    1.449    3.273       7.811       0.080         2.467         0.673
  SPPSTXTSASU3541292020310 01              SB2: 6.5 0.33  0.63  1.75  1800.   0.
  17.40  1.54  1.54     7470.      5933.     13403.    73.17    58.11   131.29
  12.256    9.734   21.990      41.224       0.115        12.666         3.454
```

```
Oil/Gas Steam                    5
  SPPS  STLSU3621   000000 00              GAS      0.28  0.00  0.00  4755.   0.
  20.10  0.00  2.57        0.      3399.      3399.     0.00    33.84    33.84
   0.000    4.805    4.805       0.000       0.000         1.796         0.490
Oil/Gas Steam_Nox                6
Nuclear                          7
Hydro                            8
  SPPS  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2445.   0.
  15.00  0.00  0.00     4702.      3448.      8150.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  SPPS  CC   1022   000000 00              GAS      0.02  0.00  0.00   912.   0.
  13.90  1.03  1.03     4087.      3135.      7223.    30.66    23.51    54.17
   0.307    0.235    0.542       0.000       0.000         2.875         0.784
  SPPS  CC   3613   000000 00              GAS      0.14  0.00  0.00    40.   0.
  19.40  0.00  1.03        0.        21.        21.     0.00     0.22     0.22
   0.000    0.015    0.015       0.000       0.000         0.012         0.003
  SPPS  CC   3622   000000 00              GAS      0.03  0.00  0.00  6283.   0.
  14.00  1.03  1.03     9549.     14233.     23782.    72.57   108.17   180.74
   1.234    1.839    3.073       0.000       0.000         9.592         2.616
  SPPS  CC   3623   000000 00              GAS      0.14  0.00  0.00   219.   0.
  19.90  0.00  1.03        0.       113.       113.     0.00     1.12     1.12
   0.000    0.080    0.080       0.000       0.000         0.060         0.016
  SPPS  CC   3624   000000 00              GAS      0.10  0.00  0.00    39.   0.
  13.90  0.00  1.03        0.         7.         7.     0.00     0.10     0.10
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  SPPSMSCC   1613   000000 00              GAS      0.17  0.00  0.00    50.   0.
  19.80  0.00  1.03        0.        26.        26.     0.00     0.26     0.26
   0.000    0.023    0.023       0.000       0.000         0.014         0.004
  SPPSTXCC   2322   000000 00              GAS      0.02  0.00  0.00   745.   0.
  13.90  1.03  1.03     2623.      2561.      5184.    19.67    19.21    38.88
   0.197    0.192    0.389       0.000       0.000         2.063         0.563
  SPPSTXCC   2722   000000 00              GAS      0.02  0.00  0.00  1140.   0.
  13.90  1.03  1.03     5109.      3919.      9028.    38.32    29.39    67.71
   0.383    0.294    0.677       0.000       0.000         3.594         0.980
  SPPSTXCC   3522   000000 00              GAS      0.02  0.00  0.00   551.   0.
  13.90  1.03  1.03     2469.      1894.      4364.    18.52    14.21    32.73
   0.185    0.142    0.327       0.000       0.000         1.737         0.474
IGCC                            10
Turbine                         11
  SPPS  CT   0812   000000 00              GAS      0.13  0.00  0.00     6.   0.
  11.20  0.00  1.03        0.         3.         3.     0.00     0.03     0.03
   0.000    0.002    0.002       0.000       0.000         0.002         0.000
  SPPS  CT   0814   000000 00              GAS      0.11  0.00  0.00    35.   0.
  11.20  0.00  1.03        0.         6.         6.     0.00     0.09     0.09
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  SPPS  CT   0823   000000 00              GAS      0.10  0.00  0.00    66.   0.
  11.20  0.00  1.03        0.        11.        11.     0.00     0.14     0.14
   0.000    0.007    0.007       0.000       0.000         0.008         0.002
  SPPS  CT   0824   000000 00              GAS      0.11  0.00  0.00   244.   0.
   2.80  0.00  1.03        0.        42.        42.     0.00     0.60     0.60
   0.000    0.033    0.033       0.000       0.000         0.032         0.009
  SPPS  CT   1012   000000 00              GAS      0.10  0.00  0.00     9.   0.
   4.30  0.00  1.03        0.         5.         5.     0.00     0.05     0.05
   0.000    0.002    0.002       0.000       0.000         0.003         0.001
  SPPS  CT   1014   000000 00              GAS      0.11  0.00  0.00    76.   0.
  10.40  0.00  1.03        0.        13.        13.     0.00     0.19     0.19
   0.000    0.011    0.011       0.000       0.000         0.010         0.003
  SPPS  CT   1022   000000 00              GAS      0.08  0.00  0.00   457.   0.
   2.80  0.00  1.03        0.        79.        79.     0.00     0.86     0.86
   0.000    0.034    0.034       0.000       0.000         0.046         0.012
  SPPS  CT   3612   000000 00              GAS      0.11  0.00  0.00    11.   0.
   9.90  0.00  1.03        0.         6.         6.     0.00     0.06     0.06
   0.000    0.003    0.003       0.000       0.000         0.003         0.001
  SPPS  CT   3614   000000 00              GAS      0.11  0.00  0.00   161.   0.
```

```
  11.00  0.00  1.03        0.        28.        28.     0.00     0.40     0.40
   0.000    0.021    0.021       0.000       0.000         0.021         0.006
  SPPS  CT   3622   000000 00               GAS      0.08  0.00  0.00   512.   0.
   2.80  0.00  1.03        0.       100.       100.     0.00     1.09     1.09
   0.000    0.044    0.044       0.000       0.000         0.058         0.016
  SPPS  CT   3623   000000 00               GAS      0.10  0.00  0.00    53.   0.
  11.20  0.00  1.03        0.         9.         9.     0.00     0.13     0.13
   0.000    0.006    0.006       0.000       0.000         0.007         0.002
  SPPS  CT   3624   000000 00               GAS      0.10  0.00  0.00   162.   0.
  11.20  0.00  1.03        0.        28.        28.     0.00     0.40     0.40
   0.000    0.021    0.021       0.000       0.000         0.021         0.006
  SPPSMSCT   1614   000000 00               GAS      0.10  0.00  0.00    15.   0.
  11.20  0.00  1.03        0.         3.         3.     0.00     0.04     0.04
   0.000    0.002    0.002       0.000       0.000         0.002         0.001
  SPPSTXCT   2214   000000 00               GAS      0.10  0.00  0.00    40.   0.
  11.20  0.00  1.03        0.         7.         7.     0.00     0.10     0.10
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  SPPSTXCT   2322   000000 00               GAS      0.08  0.00  0.00   100.   0.
   2.80  0.00  1.03        0.        17.        17.     0.00     0.19     0.19
   0.000    0.008    0.008       0.000       0.000         0.010         0.003
  SPPSTXCT   2512   000000 00               GAS      0.10  0.00  0.00     3.   0.
  11.20  0.00  1.03        0.         2.         2.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  SPPSTXCT   2513   000000 00               GAS      0.10  0.00  0.00     5.   0.
  11.20  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  SPPSTXCT   2514   000000 00               GAS      0.10  0.00  0.00    47.   0.
  11.20  0.00  1.03        0.         8.         8.     0.00     0.12     0.12
   0.000    0.006    0.006       0.000       0.000         0.006         0.002
  SPPSTXCT   2524   000000 00               GAS      0.10  0.00  0.00    48.   0.
  11.20  0.00  1.03        0.         8.         8.     0.00     0.12     0.12
   0.000    0.006    0.006       0.000       0.000         0.006         0.002
  SPPSTXCT   2722   000000 00               GAS      0.08  0.00  0.00    95.   0.
   2.80  0.00  1.03        0.        16.        16.     0.00     0.18     0.18
   0.000    0.007    0.007       0.000       0.000         0.009         0.003
  SPPSTXCT   3513   000000 00               GAS      0.10  0.00  0.00     2.   0.
   7.80  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SPPSTXCT   3514   000000 00               GAS      0.10  0.00  0.00    43.   0.
  11.20  0.00  1.03        0.         7.         7.     0.00     0.11     0.11
   0.000    0.005    0.005       0.000       0.000         0.006         0.002
Biomass                        12
Geothermal                     13
Landfill Gas                   14
  SPPS  LFGAS00     000000 00               WASTE    0.25  0.00  0.00     9.   0.
  78.60 10.48 10.48       40.        31.        71.     0.55     0.42     0.97
   0.068    0.052    0.119       0.000       0.000         0.000         0.000
Wind                           15
  SPPS  WIND 00     000000 00               NONE     0.00  0.00 71.00    66.   0.
  26.40  0.00  0.00       66.        37.       102.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  SPPS  OTHER00     000000 00               NONE     0.00  0.00  0.00    13.   0.
 103.60  0.00  0.00       57.        45.       102.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SPPS  OTHER00     000000 00               NONE     0.00  0.00  0.00    10.   0.
 103.60  0.00  0.00       44.        35.        79.     0.48     0.38     0.87
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
  SPPS  PUMPS00     000000 00               NONE     0.00  0.00 71.00   288.   0.
   6.50  0.00  0.00        0.        43.        43.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
```

```
Int. Imports                    21
Cgn_Coal                        22
  SPPS  CGCOU3641282050710 01              BB1: 3.4 0.39  1.00  3.41   307.   0.
  11.70  1.54  1.54     1243.      1003.      2246.    10.63     8.57    19.20
   2.067    1.668    3.734       9.600       0.033         1.788         0.488
Cgn_Gas                         23
  SPPS  CGCT 1012   000000 00              GAS      0.09  0.00  0.00     4.   0.
   2.80  0.00  1.03        0.         2.         2.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  SPPS  CGCT 3612   000000 00              GAS      0.11  0.00  0.00    43.   0.
   2.80  1.03  1.03       10.        22.        32.     0.09     0.21     0.31
   0.005    0.011    0.016       0.000       0.000         0.016         0.004
  SPPS  CGCT 3622   000000 00              GAS      0.11  0.00  0.00    55.   0.
   2.80  0.00  1.03        0.        28.        28.     0.00     0.28     0.28
   0.000    0.015    0.015       0.000       0.000         0.015         0.004
  SPPSTXCGCT 3512   000000 00              GAS      0.10  0.00  0.00    20.   0.
   2.80  1.03  1.03        5.        10.        15.     0.04     0.10     0.14
   0.002    0.005    0.007       0.000       0.000         0.008         0.002
  SPPSTXCGCT 3522   000000 00              GAS      0.10  0.00  0.00   254.   0.
   2.80  1.03  1.03       41.       131.       172.     0.39     1.26     1.65
   0.020    0.063    0.083       0.000       0.000         0.087         0.024
  SPPS  CGCC 1022   000000 00              GAS      0.02  0.00  0.00   448.   0.
  13.90  1.03  1.03     2008.      1540.      3548.    15.06    11.55    26.61
   0.151    0.116    0.266       0.000       0.000         1.412         0.385
  SPPS  CGCC 3622   000000 00              GAS      0.02  0.00  0.00   450.   0.
  13.90  1.03  1.03     2017.      1547.      3564.    15.13    11.60    26.73
   0.151    0.116    0.267       0.000       0.000         1.418         0.387
  SPPS  CGCC 3623   000000 00              GAS      0.18  0.00  0.00   108.   0.
  13.90  0.00  1.03        0.        56.        56.     0.00     0.55     0.55
   0.000    0.050    0.050       0.000       0.000         0.029         0.008
Cgn_Oil                         24
Cgn_Other                       25
  SPPS  CGBIO00  51 000000 00              B1-: 0.6 0.02  0.08  0.57     2.   0.
  44.80  5.36  5.36        9.         7.        15.     0.07     0.06     0.13
   0.001    0.001    0.001       0.005       0.000         0.000         0.000
  SPPS  CGOTH00     000000 00              NONE     0.00  0.00  0.00    34.   0.
 103.60  0.00  0.00      147.       114.       261.     0.59     0.45     1.04
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
Ret.ExistScrub & SCR            41
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
  SPPS  TSASU1041292020210 01     RL02     BD1: 5.1 0.05  0.06  0.51   982.  31.
  31.98  3.43  3.43     4075.      3237.      7312.    41.80    33.20    75.01
   1.045    0.830    1.875       2.250       0.019         6.985         1.905
  SPPSTXTSASU2341292020210 01     ML02SCR1 BD1: 5.1 0.05  0.06  0.51   685.  30.
  33.92  3.45  3.45     2842.      2257.      5099.    29.67    23.57    53.24
   0.742    0.589    1.331       1.597       0.013         4.958         1.352
  SPPSTXTSASU2342292020210 01     ML02SCR1 BD1: 5.1 0.05  0.06  0.51   517.  31.
  26.87  3.48  3.48     2145.      1704.      3849.    23.33    18.53    41.86
```

```
   0.583    0.463    1.047       1.256       0.011         3.898         1.063
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: CALI     (Emissions By Plant)
--------------------------------------------------
```

| | NOx | | | SO2 | MER | CO2 | Carbon | | |

```
Oil/Gas Steam                    5
  CALI  STLSU0821   000000 00              GAS      0.02  0.00  0.00  5179.   0.
  20.90  2.57  2.57    13788.      6834.     20622.   131.46    65.17   196.63
   1.315    0.652    1.966       0.000       0.000        10.435          2.846
Oil/Gas Steam_Nox                6
  CALI  STHSC0821   000000 00              GAS      0.01  0.00  0.00  3028.   0.
  21.20  0.00  2.67        0.       134.       134.     0.00     1.29     1.29
   0.000    0.008    0.008       0.000       0.000         0.068          0.019
Nuclear                          7
  CALI  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1086.   0.
 140.30  0.86  0.86     5191.      3888.      9079.    51.32    38.44    89.76
   0.000    0.000    0.000       0.000       0.000         0.000          0.000
  CALI  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1095.   0.
  95.90  0.62  0.62     5037.      3751.      8789.    52.66    39.22    91.88
   0.000    0.000    0.000       0.000       0.000         0.000          0.000
  CALI  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1109.   0.
  95.90  0.62  0.62     5642.      3429.      9071.    59.26    36.01    95.27
   0.000    0.000    0.000       0.000       0.000         0.000          0.000
  CALI  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1096.   0.
 140.30  0.86  0.86     4140.      4020.      8160.    40.93    39.75    80.68
   0.000    0.000    0.000       0.000       0.000         0.000          0.000
Hydro                            8
  CALI  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00 11313.   0.
  15.00  0.00  0.00    16750.     17655.     34405.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000          0.000
Comb.Cycle Gas                   9
  CALI  CC   0812   000000 00              GAS      0.10  0.00  0.00    40.   0.
  19.90  1.03  1.03      134.       103.       238.     1.18     0.91     2.09
   0.059    0.045    0.105       0.000       0.000         0.111          0.030
  CALI  CC   0813   000000 00              GAS      0.02  0.00  0.00    65.   0.
  14.40  0.00  1.03        0.        11.        11.     0.00     0.12     0.12
   0.000    0.001    0.001       0.000       0.000         0.007          0.002
  CALI  CC   0822   000000 00              GAS      0.02  0.00  0.00  5856.   0.
  13.90  1.03  1.03    26245.     20132.     46377.   197.65   151.61   349.27
   1.977    1.516    3.493       0.000       0.000        18.536          5.055
  CALI  CC   0823   000000 00              GAS      0.02  0.00  0.00   513.   0.
  19.40  1.03  1.03      115.        88.       203.     1.18     0.90     2.08
   0.011    0.008    0.019       0.000       0.000         0.110          0.030
  CALI  CC   0824   000000 00              GAS      0.02  0.00  0.00   272.   0.
  19.90  0.00  1.03        0.        47.        47.     0.00     0.55     0.55
   0.000    0.004    0.004       0.000       0.000         0.029          0.008
IGCC                            10
Turbine                         11
  CALI  CT   0812   000000 00              GAS      0.13  0.00  0.00     3.   0.
   9.50  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.000          0.000
  CALI  CT   0821   000000 00              GAS      0.10  0.00  0.00    48.   0.
   2.80  1.03  1.03      167.       124.       291.     1.53     1.14     2.68
   0.078    0.058    0.137       0.000       0.000         0.142          0.039
  CALI  CT   0822   000000 00              GAS      0.08  0.00  0.00  2209.   0.
   2.80  0.00  1.03        0.       380.       380.     0.00     4.16     4.16
   0.000    0.166    0.166       0.000       0.000         0.221          0.060
Biomass                         12
  CALI  BIOMS00  54 000000 00              B1-: 0.6 0.02  0.08  0.57   432.   0.
  44.80  5.36  5.36     1872.      1447.      3319.    17.09    13.21    30.30
   0.171    0.132    0.303       1.212       0.009         0.000          0.000
Geothermal                      13
  CALI  GEO  00     000000 00              GEOTH    0.00  0.00  2.97  2665.   0.
  87.40  0.00  0.00    11344.      8966.     20310.   291.69   230.53   522.21
   0.000    0.000    0.000       0.000       0.775         0.000          0.000
Landfill Gas                    14
  CALI  LFGAS00     000000 00              WASTE    0.25  0.00  0.00   216.   0.
  78.60 10.48 10.48      966.       737.      1703.    12.24     9.34    21.58
   1.506    1.148    2.654       0.000       0.000         0.000          0.000
Wind                            15
```

```
  CALI  WIND 00     000000 00                NONE     0.00  0.00 71.00  1931.   0.
  26.40  0.00  0.00     4635.      2599.      7234.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                        16
Solar                            17
  CALI  SOLAR00     000000 00                NONE     0.00  0.00 71.00   324.   0.
  47.00  0.00  0.00      516.       274.       790.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other                 18
  CALI  OTHER00     000000 00                NONE     0.00  0.00 27.90   178.   0.
 103.60  0.00  0.00      785.       619.      1403.     9.00     7.10    16.10
   0.000    0.000    0.000       0.000       0.225         0.000         0.000
Fossil_Other                     19
  CALI  WASTE081    000000 00                WASTE    0.13  0.00  0.00    20.   0.
 103.60  0.00  0.00       89.        68.       158.     0.98     0.75     1.73
   0.064    0.049    0.114       0.000       0.000         0.000         0.000
Pump Storage                     20
  CALI  PUMPS00     000000 00                NONE     0.00  0.00 71.00  4432.   0.
   6.50  0.00  0.00        0.       386.       386.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                     21
Cgn_Coal                         22
  CALI  CGCOU0811372050710 01                BB2: 4.1 0.09  1.00  4.10    68.   0.
  15.50  1.54  1.54      275.       222.       497.     2.47     1.99     4.46
   0.111    0.090    0.200       2.228       0.009         0.415         0.113
  CALI  CGCOU0831372050710 01                BB2: 4.1 0.09  1.00  4.10   153.   0.
  11.70  1.54  1.54      619.       500.      1119.     5.37     4.34     9.71
   0.242    0.195    0.437       4.854       0.020         0.904         0.247
  CALI  CGCOU0832372050710 01                BB2: 4.1 0.09  1.00  4.10    69.   0.
  11.70  1.54  1.54      279.       225.       505.     3.05     2.46     5.51
   0.137    0.111    0.248       2.753       0.011         0.513         0.140
  CALI  CGCOD0831372050307 01                BD1: 5.1 0.09  0.36  0.15    45.   0.
  35.80  3.84  3.84      182.       147.       329.     1.49     1.20     2.69
   0.067    0.054    0.121       0.484       0.000         0.250         0.068
Cgn_Gas                          23
  CALI  CGCT 0811   000000 00                GAS      0.09  0.00  0.00    25.   0.
   2.80  1.03  1.03      116.        86.       202.     0.99     0.74     1.73
   0.046    0.034    0.080       0.000       0.000         0.092         0.025
  CALI  CGCT 0812   000000 00                GAS      0.09  0.00  0.00   369.   0.
   3.30  1.03  1.03     1281.       956.      2238.    12.33     9.21    21.54
   0.567    0.424    0.991       0.000       0.000         1.143         0.312
  CALI  CGCT 0821   000000 00                GAS      0.09  0.00  0.00   162.   0.
   2.80  1.03  1.03      750.       560.      1310.     6.36     4.75    11.11
   0.293    0.219    0.511       0.000       0.000         0.590         0.161
  CALI  CGCT 0822   000000 00                GAS      0.09  0.00  0.00  2348.   0.
   2.90  1.03  1.03     4646.       919.      5565.    46.87     9.27    56.14
   2.156    0.427    2.583       0.000       0.000         2.980         0.813
  CALI  CGCC 0811   000000 00                GAS      0.02  0.00  0.00     1.   0.
  13.90  1.03  1.03        4.         3.         8.     0.03     0.02     0.05
   0.000    0.000    0.000       0.000       0.000         0.003         0.001
  CALI  CGCC 0812   000000 00                GAS      0.02  0.00  0.00   213.   0.
  14.20  1.03  1.03      955.       732.      1687.     7.95     6.10    14.04
   0.072    0.055    0.126       0.000       0.000         0.745         0.203
  CALI  CGCC 0813   000000 00                GAS      0.02  0.00  0.00   319.   0.
  14.50  1.03  1.03     1072.       822.      1895.    10.35     7.94    18.29
   0.093    0.071    0.165       0.000       0.000         0.971         0.265
  CALI  CGCC 0822   000000 00                GAS      0.02  0.00  0.00  2938.   0.
  13.90  1.03  1.03    13168.     10100.     23268.   100.71    77.25   177.95
   1.007    0.772    1.780       0.000       0.000         9.444         2.576
  CALI  CGCC 0823   000000 00                GAS      0.02  0.00  0.00   840.   0.
  14.60  1.03  1.03     2824.      2166.      4989.    27.35    20.98    48.32
   0.246    0.189    0.435       0.000       0.000         2.564         0.699
Cgn_Oil                          24
  CALI  CGLSN0821   000000 00                GAS      0.02  0.00  0.00   430.   0.
  21.60  3.02  3.02     1741.      1405.      3145.    13.16    10.62    23.79
```

```
   0.099    0.080    0.178       0.000       0.000         1.262         0.344
Cgn_Other                       25
  CALI  CGBIO00  54 000000 00              B1-: 0.6 0.02  0.08  0.57    74.   0.
  44.80  5.36  5.36      321.       248.       569.     2.80     2.17     4.97
   0.028    0.022    0.050       0.199       0.001         0.000         0.000
  CALI  CGFWT082    000000 00              WASTE    0.13  0.02 20.87    29.   0.
 103.60  0.00  0.00      130.        99.       229.     0.77     0.59     1.36
   0.050    0.038    0.089       0.011       0.014         0.000         0.000
  CALI  CGOTH00     000000 00              NONE     0.00  0.00  0.00    29.   0.
 103.60  0.00  0.00      126.        97.       223.     0.53     0.41     0.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
  CALI  STGAU0811   000000 00     OC01     GAS      0.02  0.00  0.00    80.  63.
  11.70  1.95  1.95      359.       275.       634.     2.59     1.99     4.57
   0.026    0.020    0.046       0.000       0.000         0.243         0.066
  CALI  STGAU0821   000000 00     OC01     GAS      0.02  0.00  0.00   144.  63.
  11.70  1.95  1.95      645.       495.      1139.     4.65     3.57     8.23
   0.047    0.036    0.082       0.000       0.000         0.437         0.119
  CALI  STLSC0821   000000 00     OC01     GAS      0.02  0.00  0.00    62.  63.
  11.70  1.95  1.95      278.       213.       491.     2.01     1.54     3.55
   0.020    0.015    0.035       0.000       0.000         0.188         0.051
  CALI  STHSC0821   000000 00     OC01     GAS      0.02  0.00  0.00  3941.  63.
  11.70  1.95  1.95    17665.     13550.     31214.   127.54    97.83   225.37
   1.275    0.978    2.254       0.000       0.000        11.960         3.262
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
Ret.ExistScrub & SCR            41
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
Ret.ExistScrub+GasR             47
Ret.GasReburn+Scrub             48
Ret.ACI                         49
Ret.ExistScrub&ACI              50
Ret.ExistSCR&ACI                51
Ret.ExistSNCR&ACI               52
Ret.ACI & SCR                   53
Ret.ExistScrub&ACI&SCR          54
Ret.ACI & SNCR                  55
Ret.ExistScrub&ACI&SNCR         56
Ret.ACI & Srub                  57
Ret.ExistSCR&ACI&Scrub          58
Ret.ExistSNCR&ACI&Scrub         59
Ret.ExistSNCR&ExistScrub&ACI    60
Ret.ExistSCR&ExistScrub&ACI     61
Ret.ExistNOx&ExistScrub&ACI     62
Ret.SCR & Scrub & ACI           63
Ret.SNCR & Scrub & ACI          64
Ret.O/G SCR                     65
Ret.O/G SNCR                    66
Ret.Nuclear (age 30+10 yrs)     67
```

```
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-----------------------------------------------------------------------------
Year: 2010, Region: PNW      (Emissions By Plant)
--------------------------------------------------
```

	NOx	SO2	MER	CO2	Carbon
	Generation			Trillion	
	Emission	Emission	Emission	Emission	Emission
				(lb/MBtu)	(lb/TBtu)
				(Btu)	
	(1000 Tons)	(1000 Tons)	(Tons)	(Mil Tonnes)	(Mil Tonnes)

```
/KWyr   VOM Mill/KWh    (GWh)                                    $
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  PNW WATSBSS0741372020103 01              SE1: 5.5 0.40  0.11  4.65  1340.   0.
  42.70  2.94  2.94     5561.      4417.      9978.    56.95    45.23   102.17
  11.389    9.046   20.435       5.364       0.237         9.858         2.688
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  PNW   TABU 0711371030710 01              BD1: 5.1 0.90  0.61  5.07    25.   0.
  32.00  1.54  1.54      104.        82.       186.     1.08     0.86     1.94
   0.483    0.384    0.866       0.595       0.005         0.180         0.049
  PNW ORTSASU0842372020110 01              SB1: 4.5 0.42  0.74  4.41   508.   0.
  22.40  1.54  1.54     2108.      1674.      3783.    22.85    18.14    40.99
   4.798    3.810    8.608      15.187       0.090         3.955         1.079
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  PNW   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1123.   0.
 103.70  0.66  0.66     5713.      3138.      8851.    57.49    31.58    89.07
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  PNW   HYDRO00     000000 00              HYDRO    0.00  0.00  0.00 42633.   0.
  14.80  0.00  0.00    63340.     47747.    111087.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  PNW   CC   0722   000000 00              GAS      0.03  0.00  0.00  1512.   0.
  13.90  1.03  1.03     6776.      5198.     11974.    51.93    39.84    91.77
   0.727    0.558    1.285       0.000       0.000         4.870         1.328
  PNW   CC   0822   000000 00              GAS      0.06  0.00  0.00  1533.   0.
  13.90  1.03  1.03     6871.      5270.     12141.    54.27    41.63    95.90
   1.520    1.166    2.685       0.000       0.000         5.089         1.388
  PNW   CC   8     (b)                     GAS      0.02  0.00  0.00  1482.  71.
  11.70  1.95  1.95     6817.      4920.     11736.    48.10    34.71    82.81
   0.481    0.347    0.828       0.000       0.000         4.395         1.199
IGCC                          10
```

```
Turbine                         11
  PNW   CT   0722   000000 00              GAS      0.09  0.00  0.00  1151.   0.
   2.80  1.03  1.03     5178.      3978.      9156.    55.88    42.93    98.81
   2.543    1.953    4.496       0.000       0.000         5.244         1.430
  PNW   CT   0812   000000 00              GAS      0.13  0.00  0.00     3.   0.
   2.80  1.03  1.03       14.        10.        24.     0.13     0.10     0.23
   0.008    0.006    0.015       0.000       0.000         0.012         0.003
  PNW   CT   0822   000000 00              GAS      0.09  0.00  0.00   371.   0.
   2.80  1.03  1.03     1717.      1282.      3000.    18.41    13.74    32.15
   0.810    0.605    1.415       0.000       0.000         1.706         0.465
Biomass                         12
  PNW   BIOMS00  52 000000 00              B1-: 0.6 0.02  0.08  0.57     6.   0.
  44.80  5.36  5.36       26.        20.        46.     0.21     0.16     0.37
   0.002    0.002    0.004       0.015       0.000         0.000         0.000
Geothermal                      13
  PNW   GEO  00     000000 00              GEOTH    0.00  0.00  3.70     8.   0.
  87.40  0.00  0.00       34.        27.        61.     1.10     0.87     1.97
   0.000    0.000    0.000       0.000       0.004         0.000         0.000
Landfill Gas                    14
  PNW   LFGAS00     000000 00              WASTE    0.25  0.00  0.00    21.   0.
  78.60 10.48 10.48       94.        72.       166.     1.28     0.98     2.26
   0.158    0.120    0.278       0.000       0.000         0.000         0.000
Wind                            15
  PNW   WIND 00     000000 00              NONE     0.00  0.00 71.00   412.   0.
  26.40  0.00  0.00      185.       104.       290.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  PNW   OTHER00     000000 00              NONE     0.00  0.00 40.61    58.   0.
 103.60  0.00  0.00      256.       202.       457.     2.81     2.22     5.03
   0.000    0.000    0.000       0.000       0.102         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
  PNW   WAIMP00     000000 00              NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00     6533.      4715.     11248.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                        22
Cgn_Gas                         23
  PNW   CGCC 0722   000000 00              GAS      0.07  0.00  0.00   165.   0.
  13.90  1.03  1.03      739.       567.      1307.     5.34     4.09     9.43
   0.181    0.139    0.321       0.000       0.000         0.501         0.137
  PNW   CGCC 0723   000000 00              GAS      0.07  0.00  0.00   123.   0.
  13.90  1.03  1.03      551.       423.       974.     5.42     4.16     9.57
   0.184    0.141    0.326       0.000       0.000         0.508         0.139
  PNW   CGCC 0812   000000 00              GAS      0.08  0.00  0.00    13.   0.
  13.90  1.03  1.03       58.        45.       103.     0.45     0.35     0.80
   0.017    0.013    0.031       0.000       0.000         0.042         0.012
  PNW   CGCC 0822   000000 00              GAS      0.05  0.00  0.00   820.   0.
  13.90  1.03  1.03     3675.      2819.      6494.    28.03    21.50    49.53
   0.743    0.570    1.313       0.000       0.000         2.629         0.717
Cgn_Oil                         24
Cgn_Other                       25
  PNW   CGBIO00  52 000000 00              B1-: 0.6 0.02  0.08  0.57    96.   0.
  44.80  5.36  5.36      416.       321.       738.     3.55     2.75     6.30
   0.036    0.027    0.063       0.252       0.002         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
```

```
Rep.Coal-CC                    34
Rep.O/G-CC                     35
  PNW   STLSU0721   000000 00     OC01     GAS      0.02  0.00  0.00    94.  59.
  11.70  1.95  1.95      421.       323.       744.     3.04     2.33     5.37
   0.030    0.023    0.054       0.000       0.000         0.285         0.078
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------
Year: 2010, Region: AZNM     (Emissions By Plant)
---------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                       Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
```

```
     Unit                                          Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total          Total
Scrubbed Coal_NOx               1
Scrubbed Coal                   2
  AZNM  TSUBS0841361020203 01              BD1: 5.1 0.46  0.10  2.94   365.   0.
  40.60  2.94  2.94     1515.      1203.      2718.    15.47    12.29    27.76
   3.559    2.826    6.385       1.333       0.041         2.585         0.705
  AZNM  TSUBS0841352020203 01              BD1: 5.1 0.40  0.07  2.94  2250.   0.
  42.70  2.94  2.94     9338.      7416.     16754.    90.64    71.99   162.63
  18.128   14.398   32.526       5.489       0.239        15.145         4.130
  AZNM  TSUBS0841362020203 01              BD1: 5.1 0.44  0.39  2.94  1095.   0.
  40.60  2.94  2.94     4544.      3609.      8154.    46.82    37.18    84.00
  10.276    8.162   18.438      16.569       0.124         7.822         2.133
  AZNM  TSUBS0841362020304 01              BD1: 5.1 0.40  0.20  0.25   720.   0.
  29.40  2.94  2.94     2988.      2373.      5361.    26.90    21.36    48.26
   5.379    4.272    9.651       4.886       0.006         4.494         1.226
  AZNM  TSUBS0841362020703 01              BD1: 5.1 0.40  0.52  2.94   355.   0.
  41.30  2.94  2.94     1473.      1170.      2643.    15.27    12.13    27.40
   3.055    2.426    5.481       7.070       0.040         2.552         0.696
  AZNM  TSXBS0841362020303 01              BD1: 5.1 0.46  0.07  0.15   275.   0.
  35.60  2.94  2.94     1141.       906.      2048.    11.87     9.43    21.30
   2.730    2.168    4.898       0.783       0.002         1.983         0.541
  AZNM  TSXBS0841362020703 01              BD1: 5.1 0.46  0.06  2.94   220.   0.
  42.80  2.94  2.94      913.       725.      1638.     9.59     7.61    17.20
   2.205    1.751    3.956       0.490       0.025         1.602         0.437
  AZNM  TSXBS0842362020703 01              BD1: 5.1 0.46  0.06  2.94   110.   0.
  42.70  2.94  2.94      457.       363.       819.     4.98     3.95     8.93
   1.144    0.909    2.053       0.254       0.013         0.831         0.227
  AZNM  TSXSS0841351020303 01              SD2: 6.7 0.57  0.31  1.81  1480.   0.
  42.70  2.94  2.94     6142.      4878.     11021.    59.34    47.13   106.47
  16.912   13.432   30.344      16.694       0.096        10.272         2.801
  AZNM  TSXSS0841352020203 01              SD2: 6.7 0.46  0.36  5.36   498.   0.
  35.60  2.94  2.94     2067.      1641.      3708.    21.47    17.05    38.53
   4.938    3.922    8.861       6.931       0.103         3.717         1.014
  AZNM  TSXSS0841352020303 01              SD2: 6.7 0.34  0.06  1.81   235.   0.
  35.60  2.94  2.94      975.       775.      1750.    10.15     8.06    18.21
   1.725    1.370    3.096       0.523       0.016         1.757         0.479
  AZNM  TSXSS0842351020203 01              SD2: 6.7 0.46  0.28  5.36   312.   0.
  42.70  2.94  2.94     1295.      1028.      2323.    16.66    13.23    29.90
   3.833    3.044    6.876       4.207       0.080         2.885         0.787
  AZNM  TSXSS0842351020703 01              SD2: 6.7 0.46  0.31  4.69   220.   0.
  43.00  2.94  2.94      913.       725.      1638.    10.07     8.00    18.07
   2.316    1.839    4.156       2.808       0.042         1.743         0.475
  AZNM  TSXSS0842352020203 01              SD2: 6.7 0.46  0.36  5.36   804.   0.
  41.50  2.94  2.94     3337.      2650.      5987.    39.59    31.44    71.03
   9.105    7.231   16.336      12.828       0.190         6.853         1.869
  AZNM  TSXSS0842352020703 01              SD2: 6.7 0.46  0.31  4.69   340.   0.
  43.00  2.94  2.94     1411.      1121.      2532.    15.17    12.05    27.22
   3.489    2.771    6.260       4.229       0.064         2.626         0.716
Unscrubbed Coal_NOx             3
Unscrubbed Coal                 4
  AZNM  TSBBU0841361020310 01              BB1: 3.4 0.46  0.77  0.38   156.   0.
  32.00  1.54  1.54      647.       514.      1162.     6.62     5.25    11.87
   1.522    1.209    2.730       4.570       0.002         1.105         0.301
  AZNM  TSBBU0841362020210 01              BB1: 3.4 0.40  0.78  3.07   260.   0.
  22.40  1.54  1.54     1079.       857.      1936.    11.22     8.91    20.13
   2.244    1.782    4.027       7.862       0.031         1.875         0.511
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  AZNM  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1255.   0.
  84.20  0.42  0.42     5779.      4493.     10272.    61.46    47.78   109.24
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1310.   0.
```

```
  84.20  0.42  0.42     5677.      4656.     10334.    59.61    48.89   108.50
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1259.   0.
  84.20  0.42  0.42     5303.      4623.      9926.    55.36    48.26   103.62
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  AZNM  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2490.   0.
  15.40  0.00  0.00     3484.      3538.      7022.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  AZNM  CC   0812   000000 00              GAS      0.16  0.00  0.00    19.   0.
  13.90  1.03  1.03        4.        29.        34.     0.03     0.23     0.27
   0.003    0.018    0.021       0.000       0.000         0.014         0.004
  AZNM  CC   0822   000000 00              GAS      0.02  0.00  0.00  8832.   0.
  13.90  1.03  1.03    36467.     27204.     63671.   274.70   204.93   479.63
   3.296    2.459    5.756       0.000       0.000        25.454         6.942
  AZNM  CC   0823   000000 00              GAS      0.15  0.00  0.00   510.   0.
  14.50  0.00  1.03        0.       263.       263.     0.00     2.58     2.58
   0.000    0.199    0.199       0.000       0.000         0.137         0.037
IGCC                           10
Turbine                        11
Biomass                        12
  AZNM  BIOMS00  53 000000 00              B1-: 0.6 0.02  0.08  0.57    18.   0.
  44.80  5.36  5.36       78.        60.       138.     0.62     0.48     1.11
   0.006    0.005    0.011       0.044       0.000         0.000         0.000
  AZNM  BIOCC0     (a)                     B1-: 0.6 0.02  0.08  0.57    25. 200.
  44.80  5.34  5.34      111.        80.       190.     0.91     0.66     1.57
   0.009    0.007    0.016       0.063       0.000         0.000         0.000
Geothermal                     13
  AZNM  GEO  00     000000 00              GEOTH    0.00  0.00  3.70    29.   0.
  87.40  0.00  0.00      123.        98.       221.     3.99     3.15     7.14
   0.000    0.000    0.000       0.000       0.013         0.000         0.000
  AZNM  GEOA 0     (a)                     GEOTH    0.00  0.00  3.70   143. 352.
  85.80  0.00  0.00      633.       457.      1089.    20.50    14.79    35.29
   0.000    0.000    0.000       0.000       0.065         0.000         0.000
Landfill Gas                   14
  AZNM  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    11.   0.
  78.60 10.48 10.48       49.        38.        87.     0.67     0.51     1.18
   0.083    0.063    0.146       0.000       0.000         0.000         0.000
  AZNM  LG   0     (a)                     WASTE    0.25  0.00  0.00     6. 181.
  78.60 10.48 10.48       25.        18.        43.     0.25     0.18     0.43
   0.031    0.022    0.053       0.000       0.000         0.000         0.000
Wind                           15
  AZNM  WIND 00     000000 00              NONE     0.00  0.00 71.00    49.   0.
  26.40  0.00  0.00      102.        57.       159.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  WIN510     (a)                     NONE     0.00  0.00 71.00   153. 144.
  26.40  0.00  0.00      291.       149.       441.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
  AZNM  SOLAR00     000000 00              NONE     0.00  0.00 71.00    61.   0.
  47.00  0.00  0.00       17.        12.        29.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  SLRPV0     (a)                     NONE     0.00  0.00 71.00     3. 359.
  10.00  0.00  0.00        4.         3.         6.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other               18
Fossil_Other                   19
Pump Storage                   20
  AZNM  PUMPS00     000000 00              NONE     0.00  0.00 71.00   185.   0.
   6.50  0.00  0.00       22.        46.        67.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
```

```
Cgn_Gas                        23
  AZNM  CGCT 0822   000000 00              GAS      0.11  0.00  0.00    57.   0.
   2.80  0.00  1.03        0.        30.        30.     0.00     0.29     0.29
   0.000    0.016    0.016       0.000       0.000         0.015         0.004
  AZNM  CGCC 0812   000000 00              GAS      0.15  0.00  0.00    73.   0.
  13.90  1.03  1.03       16.       113.       129.     0.14     0.95     1.09
   0.010    0.070    0.080       0.000       0.000         0.058         0.016
  AZNM  CGCC 0813   000000 00              GAS      0.15  0.00  0.00   102.   0.
  13.90  1.03  1.03       23.       158.       181.     0.21     1.47     1.68
   0.016    0.108    0.124       0.000       0.000         0.089         0.024
  AZNM  CGCC 0822   000000 00              GAS      0.04  0.00  0.00  1190.   0.
  13.90  1.03  1.03      266.      1840.      2107.     2.02    13.97    15.99
   0.037    0.258    0.296       0.000       0.000         0.849         0.231
  AZNM  CGCC 0823   000000 00              GAS      0.15  0.00  0.00   113.   0.
  13.90  1.03  1.03       25.        63.        88.     0.24     0.59     0.83
   0.018    0.044    0.062       0.000       0.000         0.044         0.012
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
```

Coal Early Retirement 73
Nuke Early Retirement 74

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu

Year: 2010, Region: RMPA (Emissions By Plant)

```
            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
  RMPA  TCOLA0831402020105 01              BE1: 6.1 0.11  0.11  0.61    80.   0.
  23.60  3.91  3.91      225.         0.       225.     2.03     0.00     2.03
   0.112    0.000    0.112       0.112       0.001         0.189         0.051
  RMPA  TCOLA0831402020105 01              BD1: 5.1 0.11  0.08  0.51    80.   0.
  23.60  3.91  3.91      107.       264.       370.     0.96     2.37     3.33
   0.053    0.131    0.183       0.125       0.001         0.310         0.085
Scrubbed Coal                  2
  RMPA  TRRBS0832342030304 01              BD1: 5.1 0.26  0.53  0.25   100.   0.
  23.10  2.94  2.94      415.       330.       745.     4.84     3.85     8.69
   0.630    0.500    1.130       2.288       0.001         0.809         0.221
  RMPA  TSABS0841341020303 01              BD1: 5.1 0.46  0.08  0.15   158.   0.
  43.00  2.94  2.94      656.       521.      1177.     6.64     5.28    11.92
   1.528    1.213    2.741       0.447       0.001         1.110         0.303
  RMPA  TSABS0841341020304 01              BD1: 5.1 0.80  0.15  0.25   107.   0.
  43.00  2.94  2.94      444.       353.       797.     4.48     3.56     8.03
   1.790    1.422    3.213       0.602       0.001         0.748         0.204
  RMPA  TSABS0841342020303 01              BD1: 5.1 0.40  0.08  0.15   352.   0.
  42.70  2.94  2.94     1461.      1160.      2621.    14.07    11.17    25.24
   2.814    2.235    5.048       0.947       0.002         2.351         0.641
  RMPA  TSABS0841342020304 01              BD1: 5.1 0.43  0.53  0.25   446.   0.
  42.80  2.94  2.94     1851.      1470.      3321.    19.47    15.47    34.94
   4.138    3.286    7.424       9.302       0.004         3.253         0.887
  RMPA  TSUBS0841332020304 01              BD1: 5.1 0.33  0.08  0.25   262.   0.
  35.60  2.94  2.94     1087.       864.      1951.    11.40     9.05    20.45
   1.880    1.493    3.374       0.767       0.003         1.904         0.519
  RMPA  TSUBS0842332020203 01              BD1: 5.1 0.33  0.15  2.94   856.   0.
  40.60  2.94  2.94     3553.      2821.      6374.    37.81    30.03    67.85
   6.334    5.030   11.364       4.987       0.100         6.318         1.723
  RMPA  TSUBS0842332020304 01              BD1: 5.1 0.45  0.15  0.25   519.   0.
  41.10  2.94  2.94     2154.      1711.      3865.    22.90    18.19    41.08
   5.106    4.056    9.162       3.081       0.005         3.826         1.043
  RMPA  TSXSS0832402020104 01              SD2: 6.7 0.18  0.13  4.36    80.   0.
  23.10  2.94  2.94      332.       264.       596.     3.82     3.03     6.85
   0.344    0.273    0.617       0.456       0.015         0.661         0.180
  RMPAWYTSZLS0841322020103 01              SE1: 5.5 0.32  0.05  4.65  1100.   0.
  35.60  2.94  2.94     4565.      3626.      8191.    47.59    37.80    85.39
   7.615    6.048   13.662       2.152       0.198         8.238         2.247
  RMPA  TSASS0841342020303 01              SD2: 6.7 0.40  0.07  1.81   178.   0.
```

```
  43.00  2.94  2.94      739.       587.      1325.     7.42     5.90    13.32
   1.485    1.179    2.664       0.466       0.012         1.285         0.350
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  RMPA  TCOLU0811351020710 01              BB1: 3.4 0.91  1.00  3.41     7.   0.
  32.00  1.54  1.54       29.        23.        52.     0.30     0.24     0.54
   0.137    0.109    0.247       0.271       0.001         0.050         0.014
  RMPA  TCOLU0811402050110 01              BB2: 4.1 0.46  0.41  2.62    30.   0.
  32.00  1.54  1.54      125.        99.       223.     1.29     1.03     2.32
   0.301    0.239    0.540       0.474       0.003         0.216         0.059
  RMPA  TCOLU0811342050710 01              BB1: 3.4 0.46  0.64  3.41    19.   0.
  32.00  1.54  1.54       79.        63.       141.     0.82     0.65     1.47
   0.189    0.150    0.340       0.474       0.003         0.137         0.037
  RMPA  TCOLU0811352050710 01              BB1: 3.4 0.47  0.45  3.41     5.   0.
  32.00  1.54  1.54       21.        16.        37.     0.22     0.17     0.39
   0.051    0.040    0.091       0.087       0.001         0.036         0.010
  RMPA  TCOLU0831331020310 01              BB2: 4.1 0.80  1.00  0.45    45.   0.
  32.00  1.54  1.54      187.       148.       335.     1.94     1.54     3.48
   0.777    0.617    1.394       1.742       0.001         0.325         0.089
  RMPA  TOLSU0812321020110 01              SB1: 4.5 1.28  1.00  4.41    15.   0.
  26.40  1.54  1.54       62.        49.       112.     0.87     0.69     1.55
   0.553    0.439    0.992       0.776       0.003         0.150         0.041
  RMPA  TSABU0841341020310 01              BB1: 3.4 0.80  0.74  0.38   106.   0.
  32.00  1.54  1.54      440.       349.       789.     4.60     3.65     8.25
   1.839    1.460    3.299       3.039       0.002         0.768         0.209
  RMPA  TSABU0841342020310 01              BB1: 3.4 0.46  0.70  0.38   208.   0.
  22.40  1.54  1.54      863.       686.      1549.     8.68     6.89    15.57
   1.995    1.585    3.580       5.425       0.003         1.450         0.395
  RMPA  TSASU0832342020310 01              SB2: 6.5 0.46  1.00  1.75    49.   0.
  32.00  1.54  1.54      203.       162.       365.     2.21     1.76     3.97
   0.509    0.405    0.914       1.987       0.003         0.383         0.105
  RMPA  TSASU0841342020310 01              SB2: 6.5 0.44  0.65  1.75  1155.   0.
  24.70  1.54  1.54     4793.      3807.      8600.    49.38    39.22    88.59
  10.937    8.686   19.623      28.793       0.078         8.547         2.331
  RMPA  TSBBU0812341020710 01              BB1: 3.4 0.96  1.00  3.41    48.   0.
  32.00  1.54  1.54      199.       158.       357.     2.50     1.99     4.49
   1.204    0.956    2.160       2.246       0.008         0.418         0.114
  RMPA  TSCBU0832342020310 01              BB1: 3.4 0.46  0.61  0.38   126.   0.
  28.50  1.54  1.54      523.       415.       938.     6.01     4.77    10.78
   1.381    1.097    2.478       3.303       0.002         1.003         0.274
  RMPA  TSCBU0841342020310 01              BB1: 3.4 0.46  0.61  0.38   133.   0.
  26.40  1.54  1.54      552.       438.       990.     5.79     4.60    10.39
   1.331    1.057    2.389       3.194       0.002         0.967         0.264
  RMPA  TSLSU0712261020110 01              SB1: 4.5 1.27  0.67  4.41    22.   0.
  32.00  1.54  1.54       91.        73.       164.     1.10     0.88     1.98
   0.698    0.554    1.253       0.658       0.004         0.191         0.052
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
Hydro                          8
  RMPA  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2692.   0.
  15.30  0.00  0.00     3767.      3826.      7592.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  RMPA  CC   0822   000000 00              GAS      0.03  0.00  0.00  1281.   0.
  13.90  1.03  1.03     3561.       436.      3998.    27.05     3.31    30.36
   0.419    0.051    0.471       0.000       0.000         1.611         0.439
IGCC                          10
Turbine                       11
Biomass                       12
  RMPA  BIOMS00  53 000000 00              B1-: 0.6 0.02  0.08  0.57     1.   0.
  44.80  5.36  5.36        4.         3.         8.     0.03     0.03     0.06
   0.000    0.000    0.001       0.002       0.000         0.000         0.000
Geothermal                    13
Landfill Gas                  14
```

```
  RMPA  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     1.   0.
  78.60 10.48 10.48        4.         3.         8.     0.06     0.05     0.11
   0.008    0.006    0.013       0.000       0.000         0.000         0.000
Wind                           15
  RMPA  WIND 00     000000 00              NONE     0.00  0.00 71.00   270.   0.
  26.40  0.00  0.00      648.       363.      1011.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
  RMPA  SOLAR00     000000 00              NONE     0.00  0.00 71.00     3.   0.
  47.00  0.00  0.00        5.         3.         7.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other               18
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
  RMPA  CGCT 0821   000000 00              GAS      0.12  0.00  0.00    36.   0.
   2.80  1.03  0.00        8.         0.         8.     0.07     0.00     0.07
   0.004    0.000    0.004       0.000       0.000         0.004         0.001
  RMPA  CGCC 0822   000000 00              GAS      0.11  0.00  0.00   144.   0.
  13.90  1.03  0.00       16.         0.        16.     0.13     0.00     0.13
   0.007    0.000    0.007       0.000       0.000         0.007         0.002
Cgn_Oil                        24
Cgn_Other                      25
  RMPA  CGBIO00  53 000000 00              B1-: 0.6 0.02  0.08  0.57     7.   0.
  44.80  5.36  5.36       30.        23.        54.     0.24     0.19     0.43
   0.002    0.002    0.004       0.017       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
```

```
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2010, Region: NWPE     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  NWPE  TSABS0841352020104 01              BD1: 5.1 0.40  0.15  3.24  1580.   0.
  42.70  2.94  2.94     5725.      3291.      9017.    59.17    34.02    93.19
  11.834    6.803   18.637       6.989       0.151         8.678         2.367
  NWPE  TSXBS0841332020103 01              BD1: 5.1 0.40  0.12  1.72  1250.   0.
  41.30  2.94  2.94     5188.      4120.      9308.    51.36    40.79    92.15
  10.272    8.158   18.430       5.529       0.079         8.581         2.340
  NWPE  TSXBS0841402020103 01              BD1: 5.1 0.43  0.17  1.72  2410.   0.
  42.30  2.94  2.94    10002.      7944.     17946.    99.89    79.33   179.22
  21.576   17.136   38.712      15.323       0.154        16.690         4.552
  NWPE  TSXBS0841332020303 01              BD1: 5.1 0.46  0.03  0.15  2440.   0.
  35.60  2.94  2.94    10126.      8043.     18169.   100.04    79.45   179.49
  22.859   18.155   41.014       3.096       0.014        16.715         4.559
  NWPE  TSXBS0841362020304 01              BD1: 5.1 0.28  0.11  0.25   274.   0.
  35.60  2.94  2.94     1137.       778.      1915.    11.38     7.79    19.17
   1.594    1.090    2.684       1.078       0.002         1.785         0.487
  NWPE  TSXSS0741322020703 01              SE1: 5.5 0.40  0.08  3.87   700.   0.
  35.60  2.94  2.94     2905.      2307.      5212.    30.36    24.11    54.46
   6.071    4.822   10.893       2.059       0.105         5.255         1.433
  NWPE  TSXSS0742322020703 01              SD1: 4.4 0.40  0.13  3.08  1360.   0.
  41.60  2.94  2.94     5644.      4483.     10127.    62.13    49.35   111.48
  12.426    9.869   22.295       7.101       0.172        10.755         2.933
  NWPEWYTSZLS0841322020703 01              SD1: 4.4 0.40  0.17  3.08   330.   0.
  42.70  2.94  2.94     1370.      1088.      2457.    14.38    11.42    25.80
   2.876    2.284    5.160       2.167       0.040         2.489         0.679
  NWPEWYTSZLS0842322020104 01              SD1: 4.4 0.50  0.19  2.86   335.   0.
  40.60  2.94  2.94     1390.      1104.      2495.    16.24    12.90    29.14
```

```
   4.060    3.224    7.284       2.815       0.042         2.811         0.767
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  NWPE  TCOLU0811332050710 01              BB2: 4.1 0.44  0.53  4.10     8.   0.
  32.00  1.54  1.54       33.        26.        60.     0.35     0.27     0.62
   0.076    0.061    0.137       0.163       0.001         0.058         0.016
  NWPE  TCOLU0831332050710 01              BB1: 3.4 0.44  1.00  3.41    50.   0.
  11.70  1.54  1.54      208.       165.       372.     2.16     1.71     3.87
   0.478    0.380    0.858       1.936       0.007         0.361         0.098
  NWPE  TSABU0832332020110 01              BB2: 4.1 0.40  0.78  2.62    70.   0.
  32.00  1.54  1.54      291.       231.       521.     3.25     2.58     5.84
   0.651    0.517    1.168       2.274       0.008         0.544         0.148
  NWPE  TSABU0841332020110 01              BB1: 3.4 0.40  0.78  2.18   105.   0.
  32.00  1.54  1.54      436.         0.       436.     4.58     0.00     4.58
   0.915    0.000    0.915       1.780       0.005         0.426         0.116
  NWPE  TSABU0841332020110 01              BB2: 4.1 0.40  0.78  2.62   105.   0.
  32.00  1.54  1.54        0.       346.       346.     0.00     3.63     3.63
   0.000    0.727    0.727       1.414       0.005         0.338         0.092
  NWPE  TSABU0841352020310 01              BB1: 3.4 0.31  0.68  0.38   258.   0.
  17.40  1.54  1.54     1071.       850.      1921.    10.76     8.54    19.30
   1.667    1.324    2.992       6.534       0.004         1.797         0.490
  NWPE  TSASU0742322020110 01              SB1: 4.5 0.40  1.00  4.41   156.   0.
  26.40  1.54  1.54      647.       514.      1162.     7.13     5.66    12.79
   1.426    1.132    2.558       6.395       0.028         1.234         0.337
  NWPE  TSASU0841322020110 01              SB1: 4.5 0.46  1.00  4.41   106.   0.
  32.00  1.54  1.54      440.       349.       789.     4.66     3.70     8.37
   1.073    0.852    1.924       4.183       0.018         0.807         0.220
  NWPE  TSASU0842322020110 01              SB1: 4.5 0.61  1.00  4.41   336.   0.
  32.00  1.54  1.54     1394.      1108.      2502.    15.01    11.92    26.93
   4.585    3.642    8.227      13.464       0.059         2.598         0.709
  NWPE  TSBBU0841332020110 01              BB1: 3.4 0.40  1.00  2.18   425.   0.
  26.40  1.54  1.54      556.         0.       556.     5.39     0.00     5.39
   1.078    0.000    1.078       2.695       0.006         0.502         0.137
  NWPE  TSBBU0841332020110 01              BB2: 4.1 0.40  1.00  2.62   425.   0.
  26.40  1.54  1.54     1208.      1401.      2609.    11.72    13.59    25.31
   2.344    2.718    5.061      12.654       0.033         2.357         0.643
  NWPE  TSXBU0841402020110 01              BB2: 4.1 0.40  0.30  2.62   370.   0.
  28.90  1.54  1.54     1536.      1220.      2755.    15.58    12.37    27.95
   3.115    2.474    5.589       4.192       0.037         2.602         0.710
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
Hydro                          8
  NWPE  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  1758.   0.
  15.20  0.00  0.00     2460.      2498.      4958.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  NWPE  CC   0722   000000 00              GAS      0.02  0.00  0.00   240.   0.
  13.90  1.03  1.03      169.        41.       211.     1.27     0.31     1.58
   0.013    0.003    0.016       0.000       0.000         0.084         0.023
IGCC                          10
  NWPE  IGCC 0831402050710 00              BE1: 6.1 0.06  0.00  0.30   100.   0.
  31.40  1.00  1.00      433.       335.       768.     3.15     2.44     5.59
   0.095    0.073    0.168       0.000       0.001         0.520         0.142
Turbine                       11
Biomass                       12
  NWPE  BIOMS00  52 000000 00              B1-: 0.6 0.02  0.08  0.57     5.   0.
  44.80  5.36  5.36       22.        17.        38.     0.17     0.13     0.31
   0.002    0.001    0.003       0.012       0.000         0.000         0.000
Geothermal                    13
  NWPE  GEO  00     000000 00              GEOTH    0.00  0.00  3.65   241.   0.
  87.40  0.00  0.00     1026.       811.      1837.    32.60    25.77    58.37
   0.000    0.000    0.000       0.000       0.106         0.000         0.000
Landfill Gas                  14
Wind                          15
```

```
  NWPE  WIND 00     000000 00              NONE     0.00  0.00 71.00   138.   0.
  26.40  0.00  0.00       62.        35.        97.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
  NWPE  SOLAR00     000000 00              NONE     0.00  0.00 71.00    24.   0.
  47.00  0.00  0.00       38.        20.        59.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other                18
Fossil_Other                    19
  NWPE  WASTE072    000000 00              WASTE    0.70  0.01 10.30    41.   0.
 103.60  0.00  0.00      183.       140.       323.     2.02     1.54     3.56
   0.706    0.538    1.244       0.012       0.018         0.000         0.000
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
  NWPE  CGCOU0731322050710 01            SB1: 4.5 0.36  1.00  4.55    55.   0.
  11.70  1.54  1.54      223.       180.       402.     1.81     1.46     3.28
   0.325    0.263    0.588       1.638       0.007         0.316         0.086
Cgn_Gas                         23
  NWPE  CGCC 0811   000000 00              GAS      0.15  0.00  0.00    10.   0.
  13.90  1.03  1.03       45.        26.        71.     0.29     0.17     0.45
   0.021    0.012    0.033       0.000       0.000         0.024         0.007
Cgn_Oil                         24
Cgn_Other                       25
  NWPE  CGOTH00     000000 00              NONE     0.00  0.00  0.00    10.   0.
 103.60  0.00  0.00       43.        33.        77.     0.18     0.14     0.32
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
Ret.ExistScrub & SCR            41
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
Ret.ExistScrub+GasR             47
Ret.GasReburn+Scrub             48
Ret.ACI                         49
Ret.ExistScrub&ACI              50
Ret.ExistSCR&ACI                51
Ret.ExistSNCR&ACI               52
Ret.ACI & SCR                   53
Ret.ExistScrub&ACI&SCR          54
Ret.ACI & SNCR                  55
Ret.ExistScrub&ACI&SNCR         56
Ret.ACI & Srub                  57
Ret.ExistSCR&ACI&Scrub          58
Ret.ExistSNCR&ACI&Scrub         59
Ret.ExistSNCR&ExistScrub&ACI    60
Ret.ExistSCR&ExistScrub&ACI     61
Ret.ExistNOx&ExistScrub&ACI     62
```

Ret.SCR & Scrub & ACI	63
Ret.SNCR & Scrub & ACI	64
Ret.O/G SCR	65
Ret.O/G SNCR	66
Ret.Nuclear (age 30+10 yrs)	67
Ret.Nuclear (age 40+20 yrs)	68
Ret. Biomass Cofiring	69
CT Early Retirement	70
CC Early Retirement	71
O/G Early Retirement	72
Coal Early Retirement	73
Nuke Early Retirement	74

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation reported in BBtu

---

Year: 2010, Region: MECS (Emissions By Plant Type)

	Generation (GWh)		Emission (1000 Tons)		Emission (Tons)		Trillion (Btu)		Emission (Mil Tonnes)		Carbon Emission (Mil Tonnes)		NOx Emission (1000 Tons)	
	WINTER Total	SUMMER Total	Total	WINTER Total	SUMMER Total	Total	WINTER Total	SUMMER Total	Total					
Total Scrubbed Coal_NOx	1													
	83.	66.	149.	0.86	0.69	1.55	0.168	0.134	0.302	0.258	0.000	0.144	0.039	
Total Scrubbed Coal	2													
	444.	318.	761.	5.00	3.59	8.60	0.781	0.563	1.344	0.400	0.010	0.801	0.218	
Total Unscrubbed Coal_NOx	3													
	12533.	9954.	22488.	115.39	91.65	207.04	2.171	1.725	3.896	103.521	0.456	19.970	5.446	
Total Unscrubbed Coal	4													
	25544.	18702.	44246.	251.61	184.01	435.63	41.855	30.570	72.425	202.435	0.772	41.301	11.264	
Total Oil/Gas Steam	5													
	1053.	570.	1623.	10.10	5.46	15.56	1.005	0.544	1.548	0.000	0.000	0.826	0.225	
Total Oil/Gas Steam_Nox	6													
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Total Nuclear	7													
	4676.	4072.	8748.	60.17	52.40	112.57	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Total Hydro	8													
	618.	395.	1013.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Total Comb.Cycle Gas	9													
	2936.	2206.	5141.	22.02	16.56	38.58	0.220	0.171	0.391	0.000	0.000	2.048	0.558	
Total IGCC	10													
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Total Turbine 11
2. 70. 72. 0.02 0.75 0.77 0.001 0.033
0.034 0.000 0.000 0.041 0.011
Total Biomass 12
698. 539. 1237. 6.44 4.97 11.41 0.064 0.050
0.114 0.456 0.003 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
22. 17. 39. 0.31 0.23 0.54 0.038 0.029
0.066 0.000 0.000 0.000 0.000
Total Wind 15
2. 1. 2. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
145. 115. 260. 1.60 1.26 2.86 0.000 0.000
0.000 0.000 0.046 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
387. 839. 1226. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
122. 88. 210. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
223. 151. 373. 2.31 1.56 3.88 0.468 0.316
0.784 1.940 0.007 0.361 0.099
Total Cgn_Gas 23
1987. 1691. 3679. 14.16 12.52 26.67 1.037 0.945
1.982 0.000 0.000 1.415 0.386
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
316. 244. 561. 1.68 1.30 2.98 0.007 0.005
0.012 0.050 0.062 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                 33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                     34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                      35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                   36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                    37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub            38
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub           39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                         40
    5806.       4611.      10417.    54.26    43.10    97.36     1.448    1.150
 2.598      48.679       0.128         9.066         2.473
Total Ret.ExistScrub & SCR            41
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                        42
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR           43
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                    44
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                  45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                  46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR             47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub             48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                         49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI              50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI                51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI               52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                   53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR          54
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret. Biomass Cofiring          69
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CT Early Retirement            70
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CC Early Retirement            71
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total O/G Early Retirement           72
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Coal Early Retirement          73
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Nuke Early Retirement          74
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000

Total MECS
   57598.     44649.    102247.   545.94   420.06   966.00    49.264   36.234
```

85.498 357.737 1.484 75.972 20.720

(**) Industrial Boiler Generation in BBtu, not included in the total regional generation

---

Year: 2010, Region: ECAO (Emissions By Plant Type)

	Generation (GWh)			Trillion (Btu)			SO2 Emission (1000 Tons)	MER Emission (Tons)	CO2 Emission (Mil Tonnes)	Carbon Emission (Mil Tonnes)	NOx Emission (1000 Tons)			
	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	Total	Total	Total	Total	Total
Total Scrubbed Coal_NOx	1													
	40142.	31699.	71841.	395.14	311.67	706.81	13.174	10.042	23.216	90.913	0.400	65.820	17.951	
Total Scrubbed Coal	2													
	7355.	5765.	13120.	74.71	58.48	133.19	15.032	11.743	26.775	21.933	0.233	12.403	3.383	
Total Unscrubbed Coal_NOx	3													
	17779.	12807.	30585.	170.52	122.67	293.19	14.388	10.557	24.944	194.391	0.538	27.303	7.446	
Total Unscrubbed Coal	4													
	43144.	29919.	73063.	435.32	301.19	736.51	87.972	60.337	1 48.308	432.255	1.438	68.824	18.770	
Total Oil/Gas Steam	5													
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Total Oil/Gas Steam_Nox	6													
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Total Nuclear	7													
	22310.	14698.	37008.	234.04	153.98	388.02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Total Hydro	8													
	1806.	1169.	2974.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Total Comb.Cycle Gas	9													
	4303.	3297.	7600.	32.37	24.80	57.17	0.373	0.286	0.659	0.000	0.000	3.034	0.827	
Total IGCC	10													
	1135.	877.	2013.	8.26	6.38	14.64	0.413	0.319	0.732	0.000	0.006	1.364	0.372	
Total Turbine	11													
	1152.	666.	1818.	12.59	7.28	19.87	0.511	0.295	0.806	0.000	0.000	1.055	0.288	
Total Biomass	12													
	364.	281.	645.	3.36	2.59	5.95	0.034	0.026	0.060	0.238	0.002	0.000	0.000	
Total Geothermal	13													
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Total Landfill Gas	14													
	54.	41.	95.	0.73	0.56	1.29	0.090	0.069						

```
 0.159       0.000       0.000         0.000         0.000
Total Wind                            15
     164.        92.       256.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                           17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
     397.       313.       710.     4.36     3.44     7.81     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                    19
     268.       205.       473.     2.95     2.25     5.20     0.614    0.468
 1.082       0.000       0.000         0.000         0.000
Total Pump Storage                    20
      51.       110.       160.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
     678.       466.      1144.     6.18     4.18    10.37     1.382    0.954
 2.335       4.739       0.019         0.965         0.263
Total Cgn_Gas                         23
     376.       288.       664.     2.90     2.22     5.11     0.037    0.028
 0.065       0.000       0.000         0.271         0.074
Total Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
      26.        20.        46.     0.22     0.17     0.39     0.002    0.002
 0.004       0.016       0.000         0.000         0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                   27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                 28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                         30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                         31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                       32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                 33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                     34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                      35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                   36
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                  37
    1536.      1220.      2756.    15.43    12.25    27.68     3.487    2.769
 6.256       1.661       0.032         2.578         0.703
Total Ret.ExistSCR & Scrub          38
   41836.     33227.     75063.   398.62   316.59   715.21    10.779    8.561
19.340      72.203       0.332        66.603        18.164
Total Ret.ExistSNCR & Scrub         39
    5613.      4458.     10070.    52.88    42.00    94.88     6.694    5.317
12.011      11.007       0.136         8.836         2.410
Total Ret.SCR                       40
   32195.     22776.     54971.   305.01   215.27   520.28     9.472    6.756
16.228     280.880       0.941        48.655        13.270
Total Ret.ExistScrub & SCR          41
   47960.     38091.     86050.   476.05   378.09   854.14    12.565    9.979
22.544     178.798       0.403        79.540        21.693
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
   46545.     36967.     83511.   449.14   356.72   805.86    12.068    9.585
21.653      75.850       0.409        75.044        20.467
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total ECAO
  317187.    239450.    556637.  3080.79  2322.80  5403.59   189.086  138.093  3
27.178    1364.884       4.889       462.294       126.080
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
```

NOx
SO2 MER CO2 Carbon
Year: 2010, Region: ERCT (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Scrubbed Coal 2
17327. 18650. 35977. 184.92 201.26 386.18 29.105 31.384
60.489 119.034 0.978 37.625 10.261
Total Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal 4
7437. 5907. 13344. 71.94 57.14 129.08 11.191 8.888
20.079 45.628 0.334 12.303 3.355
Total Oil/Gas Steam 5
2971. 20376. 23348. 29.30 203.76 233.05 5.790 29.167
34.958 0.000 0.000 12.368 3.373
Total Oil/Gas Steam_Nox 6
420. 1686. 2106. 4.07 16.69 20.76 0.313 1.128
1.441 0.000 0.000 1.102 0.301
Total Nuclear 7
22733. 17771. 40504. 237.70 185.63 423.33 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
431. 365. 796. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
67602. 53416. 121018. 507.44 401.82 909.25 5.164 4.281
9.445 0.000 0.000 48.254 13.160
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
744. 1129. 1873. 8.77 13.23 22.00 0.404 0.618
1.022 0.000 0.000 1.167 0.318
Total Biomass 12
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
432. 324. 755. 5.41 4.07 9.48 0.665 0.501
1.166 0.000 0.000 0.000 0.000
Total Wind 15
1852. 1022. 2874. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18

```
      44.        35.        79.     0.48     0.38     0.87     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                   19
       9.         7.        16.     0.10     0.08     0.17     0.020    0.016
 0.036       0.000       0.000         0.000         0.000
Total Pump Storage                   20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                        23
    9201.     11573.     20774.    71.14    90.11   161.25     1.629    2.327
 3.956       0.000       0.000         8.558         2.334
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
      41.        31.        71.     0.25     0.19     0.44     0.045    0.034
 0.079       0.000       0.004         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
    7973.      6332.     14305.    85.48    67.89   153.36    12.805   10.170
22.974      22.238       0.647        14.984         4.087
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.SCR                        40
    6808.      6611.     13419.    69.13    67.08   136.22     1.735    1.684
 3.419      59.839       0.259       13.142         3.584
Total Ret.ExistScrub & SCR           41
    9597.      8208.     17805.    98.59    84.28   182.87     2.465    2.107
 4.572      30.473       0.394       17.797         4.854
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
    1291.      1025.      2316.    14.36    11.40    25.76     0.359    0.285
 0.644       3.735       0.098         2.517         0.686
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
    1056.      1662.      2718.    10.25    16.19    26.45     0.810    1.220
 2.030       0.000       0.000         1.404         0.383
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total ERCT
  157970.    156129.    314099.  1399.33  1421.20  2820.53    72.499   93.810  1
66.309     280.946       2.713       171.222        46.697
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: MACE     (Emissions By Plant Type)
             Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
```

```
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
    3905.      2598.      6503.    37.21    24.76    61.97     3.087    2.054
 5.142       6.957       0.271         5.771         1.574
Total Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx            3
    5414.      4023.      9437.    55.06    40.81    95.86     5.517    4.065
 9.582      52.725       0.162         8.927         2.435
Total Unscrubbed Coal                4
     992.       776.      1768.    10.13     7.91    18.04     1.959    1.536
 3.495       9.923       0.025         1.680         0.458
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   40007.     29348.     69355.   425.28   312.14   737.41     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    2346.      1770.      4115.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    6376.      4942.     11318.    49.22    38.51    87.73     0.950    0.787
 1.737       0.000       0.000         4.656         1.270
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       1.       415.       416.     0.01     4.56     4.57     0.000    0.201
 0.201       0.000       0.000         0.242         0.066
Total Biomass                       12
     159.       116.       275.     1.30     0.95     2.25     0.013    0.010
 0.022       0.090       0.001         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
     354.       260.       614.     3.81     2.81     6.62     0.469    0.345
 0.814       0.000       0.000         0.000         0.000
Total Wind                          15
     129.        67.       196.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
      10.         8.        18.     0.08     0.06     0.13     0.015    0.011
 0.027       0.000       0.000         0.007         0.002
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
    1133.       893.      2026.    12.46     9.83    22.29     0.000    0.000
 0.000       0.000       0.791         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
     264.       199.       463.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Cgn_Coal                          22
     789.       538.      1327.     6.62     4.51    11.13     1.608    1.095
 2.703       6.119       0.029         1.036         0.283
Total Cgn_Gas                           23
    4243.      2821.      7064.    30.90    21.14    52.04     1.165    0.857
 2.022       0.000       0.000         2.762         0.753
Total Cgn_Oil                           24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                         25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                    26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                     27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                   28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                          29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                           30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                           31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                         32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                   33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                       34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                        35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                     36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                      37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub              38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub             39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                           40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR              41
    2411.      1915.      4326.    24.06    19.11    43.18     0.602    0.478
 1.079       3.277       0.040         4.021         1.097
Total Ret.SNCR                          42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR             43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                 45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
    2490.       1978.       4468.    23.65    18.78    42.43     0.544    0.432
 0.976       4.667       0.039         3.951         1.078
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MACE
   71024.     52667.    123691.   679.78   505.86  1185.64    15.929   11.870
27.800      83.759       1.357        33.052         9.014
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: MACW     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
    4856.      3856.      8712.    45.81    36.39    82.20     0.701    0.556
 1.257       6.960       0.058         7.655         2.088
Total Scrubbed Coal                 2
     133.       105.       238.     1.38     1.10     2.48     0.277    0.220
 0.497       0.654       0.009         0.231         0.063
Total Unscrubbed Coal_NOx           3
     473.       288.       761.     4.71     2.87     7.58     0.881    0.537
 1.418       4.171       0.013         0.706         0.193
```

```
Total Unscrubbed Coal                  4
    9470.      6906.     16376.    91.40    66.47   157.88    18.486   13.417
31.902      88.101       0.280        14.702         4.010
Total Oil/Gas Steam                    5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox                6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                          7
   14951.      9693.     24644.   159.13   103.35   262.48     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                            8
    1512.       632.      2144.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                   9
    5422.      1385.      6806.    40.66    10.38    51.05     0.407    0.104
 0.510       0.000       0.000         2.709         0.739
Total IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                         11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Biomass                         12
      74.        57.       131.     0.68     0.53     1.20     0.007    0.005
 0.012       0.048       0.000         0.000         0.000
Total Geothermal                      13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                    14
       4.         3.         8.     0.06     0.05     0.11     0.008    0.006
 0.013       0.000       0.000         0.000         0.000
Total Wind                            15
      17.        10.        27.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                           17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
     525.       414.       938.     5.77     4.55    10.32     0.000    0.000
 0.000       0.000       0.336         0.000         0.000
Total Fossil_Other                    19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                    20
     125.       473.       598.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
    2253.      1635.      3888.    20.88    14.98    35.86     3.988    2.845
 6.833      14.798       0.092         3.339         0.911
Total Cgn_Gas                         23
       0.        55.        55.     0.00     0.51     0.51     0.000    0.046
 0.046       0.000       0.000         0.027         0.007
Total Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
     156.       121.       277.     0.83     0.64     1.48     0.004    0.003
```

0.007 0.027 0.007 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
11129. 8839. 19967. 104.72 83.17 187.90 2.560 2.033
4.593 19.469 0.230 17.498 4.772
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
7574. 6016. 13590. 70.28 55.81 126.09 1.757 1.395
3.152 5.655 0.116 11.742 3.202
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
6907. 5486. 12393. 67.00 53.21 120.21 1.675 1.330
3.005 11.295 0.135 11.195 3.053
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                        49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI               51
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuke Early Retirement 74
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total MACW
65580. 45972. 111552. 613.32 434.03 1047.35 30.749 22.497
53.246 151.180 1.275 69.803 19.037

(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2010, Region: MACS (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Scrubbed Coal 2
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal_NOx 3
1321. 1049. 2370. 13.48 10.71 24.19 3.411 2.709
6.120 18.143 0.017 2.253 0.614
Total Unscrubbed Coal 4
2735. 1794. 4529. 25.97 17.02 42.99 4.841 3.167
8.008 30.728 0.155 4.003 1.092
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
8494. 5572. 14066. 92.30 60.55 152.85 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
      43.        16.        59.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
      95.       163.       258.     0.81     1.39     2.20     0.032    0.055
 0.088       0.000       0.000         0.117         0.032
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
     391.       928.      1319.     4.55    11.74    16.29     0.238    0.647
 0.884       0.000       0.000         0.865         0.236
Total Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
      18.        14.        32.     0.24     0.19     0.43     0.030    0.023
 0.053       0.000       0.000         0.000         0.000
Total Wind                          15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
     242.       191.       434.     2.67     2.10     4.77     0.000    0.000
 0.000       0.000       0.169         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
     186.       143.       329.     1.83     1.40     3.23     0.073    0.056
 0.129       0.000       0.000         0.172         0.047
Total Cgn_Oil                       24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
     234.       181.       415.     0.98     0.76     1.74     0.000    0.000
 0.000       0.000       0.062         0.000         0.000
Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other               28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                      29
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
    6562.      5212.     11773.    65.99    52.41   118.40     1.512    1.201
 2.712      12.495       0.062        11.026         3.007
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
    7505.      5960.     13465.    69.90    55.51   125.41     2.237    1.776
 4.013       5.518       0.066        11.679         3.185
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MACS
   27826.     21222.     49048.   278.73   213.77   492.50    12.374    9.634
22.008      66.884       0.530        30.113         8.213
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: WUMS     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
     522.       363.       886.     5.72     4.01     9.73     0.885    0.624
 1.509       4.071       0.007         0.906         0.247
Total Unscrubbed Coal_NOx           3
     219.       174.       392.     2.35     1.86     4.21     0.526    0.418
 0.944       1.441       0.009         0.406         0.111
Total Unscrubbed Coal               4
   21090.     15743.     36833.   219.38   163.43   382.81    36.275   27.062
63.337     155.740       0.847        36.523         9.961
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
    6577.      5013.     11590.    69.75    53.40   123.15     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
    1007.       676.      1683.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                9
     619.       445.      1064.     5.26     3.78     9.04     0.316    0.227
 0.542       0.000       0.000         0.480         0.131
Total IGCC                         10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                      11
```

```
    1499.       910.      2409.    13.61     8.86    22.47     0.644    0.401
 1.045       0.000       0.000         1.193         0.325
Total Biomass                        12
      52.        40.        92.     0.42     0.32     0.74     0.004    0.003
 0.007       0.030       0.000         0.000         0.000
Total Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                   14
     161.       119.       280.     1.84     1.36     3.20     0.226    0.168
 0.394       0.000       0.000         0.000         0.000
Total Wind                           15
      20.        11.        32.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                      16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
      61.        49.       110.     0.51     0.41     0.92     0.094    0.076
 0.171       0.459       0.003         0.089         0.024
Total Cgn_Gas                        23
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
3405. 2705. 6110. 35.11 27.89 63.00 0.878 0.697
1.575 25.956 0.198 6.078 1.658
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
213. 169. 383. 2.22 1.76 3.98 0.577 0.458
1.035 1.135 0.006 0.371 0.101
Total Ret.SCR+Scrb 44
1226. 973. 2199. 11.13 8.84 19.98 0.278 0.221
0.499 0.559 0.023 1.927 0.526
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring          69
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement            70
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement            71
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement           72
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement          73
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement          74
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total WUMS
   36672.      27391.      64063.   367.30   275.93   643.23    40.705   30.354
71.059     189.390       1.094        47.972        13.083
```


(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2010, Region: MANO (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
249. 198. 447. 2.49 1.97 4.46 0.257 0.204
0.460 0.557 0.001 0.415 0.113
Total Scrubbed Coal 2
1602. 1272. 2874. 17.47 13.87 31.34 3.889 3.089
6.979 8.547 0.055 2.918 0.796
Total Unscrubbed Coal_NOx 3
1015. 619. 1634. 9.91 6.04 15.95 1.462 0.891
2.353 5.424 0.050 1.539 0.420
Total Unscrubbed Coal 4
39385. 27916. 67301. 397.27 281.41 678.68 60.148 42.636 1
02.784 282.096 1.499 64.737 17.656
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
60233. 44880. 105113. 635.77 473.27 1109.03 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
1079. 747. 1826. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
2243. 1719. 3962. 16.83 12.89 29.72 0.168 0.129
0.297 0.000 0.000 1.577 0.430
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
1. 1010. 1011. 0.01 11.02 11.02 0.000 0.454
0.455 0.000 0.000 0.585 0.160
Total Biomass 12
4. 3. 8. 0.03 0.03 0.06 0.000 0.000
0.001 0.002 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
170. 130. 300. 2.32 1.77 4.09 0.285 0.218
0.503 0.000 0.000 0.000 0.000

```
Total Wind                          15
      88.        49.       137.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
      93.        73.       166.     1.02     0.80     1.82     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       9.         7.        16.     0.10     0.08     0.17     0.020    0.016
 0.036       0.000       0.000         0.000         0.000
Total Pump Storage                  20
      72.       142.       214.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
      32.        26.        58.     0.24     0.20     0.44     0.002    0.003
 0.005       0.000       0.000         0.023         0.006
Total Cgn_Oil                       24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other               28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                       31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
6732. 5347. 12080. 65.21 51.79 117.01 10.577 8.401
18.978 12.562 0.153 10.896 2.972
Total Ret.ExistSCR & Scrub 38
2251. 1788. 4039. 23.53 18.69 42.22 0.859 0.682
1.541 5.277 0.017 3.931 1.072
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
4346. 3263. 7608. 46.02 34.50 80.52 1.695 1.267
2.962 40.261 0.106 7.498 2.045
Total Ret.ExistScrub & SCR 41
2225. 1767. 3991. 22.63 17.97 40.59 0.694 0.551
1.245 10.868 0.014 3.780 1.031
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
14342. 11391. 25733. 145.75 115.76 261.51 4.944 3.926
8.870 25.430 0.096 24.353 6.642
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MANO
  136171.    102346.    238516.  1386.58  1042.06  2428.64    85.002   62.468  1
47.470     391.025       1.991       122.255        33.342
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
```

```
                                                                                                                                  NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: MAPP     (Emissions By Plant Type)
             Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                  2
   27441.     20467.     47907.   294.25   219.29   513.54    56.931   42.223
99.154      88.846       1.307        49.684        13.550
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
   33718.     24154.     57872.   357.41   255.66   613.07    73.076   53.026  1
26.101     265.187       1.401        58.586        15.978
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   14485.     11391.     25876.   155.23   121.81   277.04     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    5412.      4577.      9989.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
     247.       592.       840.     1.89     4.60     6.50     0.031    0.087
 0.118       0.000       0.000         0.345         0.094
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
      15.       492.       506.     0.13     5.34     5.47     0.007    0.228
 0.236       0.000       0.000         0.290         0.079
Total Biomass                       12
     706.       546.      1252.     5.72     4.42    10.14     0.057    0.044
 0.101       0.405       0.003         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
      49.        38.        87.     0.67     0.51     1.18     0.083    0.063
 0.146       0.000       0.000         0.000         0.000
Total Wind                          15
    1485.       830.      2315.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
     150.       118.       268.     1.65     1.30     2.95     0.000    0.000
```

0.000 0.000 0.105 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
1. 1. 2. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
312. 252. 563. 2.79 2.25 5.03 0.706 0.570
1.276 1.283 0.009 0.469 0.128
Total Cgn_Gas 23
0. 5. 5. 0.00 0.06 0.06 0.000 0.002
0.002 0.000 0.000 0.003 0.001
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
9. 7. 15. 0.04 0.03 0.06 0.000 0.000
0.000 0.000 0.002 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
5738. 4557. 10295. 65.39 51.93 117.32 23.823 18.921
42.744 6.805 0.330 11.463 3.126
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40

```
    9923.      7196.     17119.   101.03    73.30   174.33     2.829    2.037
 4.866      80.182       0.358        16.583         4.523
Total Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MAPP
   99690.     75221.    174911.   986.20   740.49  1726.70   157.544  117.201  2
74.745     442.708       3.516       137.423        37.479
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: UPNY     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
               (GWh)                            (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

```
Total Scrubbed Coal_NOx                1
    3453.      2742.      6195.    31.97    25.39    57.35     0.671    0.533
 1.204       6.333       0.053         5.341         1.457
Total Scrubbed Coal                    2
     618.       491.      1109.     5.85     4.64    10.49     1.228    0.975
 2.203       1.049       0.014         0.977         0.266
Total Unscrubbed Coal_NOx              3
    1502.      1193.      2696.    14.92    11.85    26.77     1.768    1.404
 3.171      17.183       0.073         2.492         0.680
Total Unscrubbed Coal                  4
    5449.      4328.      9777.    56.43    44.82   101.25    10.503    8.342
18.845      66.728       0.346         9.429         2.572
Total Oil/Gas Steam                    5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox                6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                          7
   12810.     11276.     24086.   134.29   118.29   252.57     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                            8
   15534.     10355.     25889.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                   9
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                         11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Biomass                         12
      78.        60.       138.     0.72     0.56     1.28     0.007    0.006
 0.013       0.051       0.000         0.000         0.000
Total Geothermal                      13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                    14
      27.        20.        47.     0.37     0.28     0.65     0.045    0.034
 0.079       0.000       0.000         0.000         0.000
Total Wind                            15
      87.        49.       136.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                       16
       5.         3.         8.     0.03     0.03     0.06     0.007    0.005
 0.012       0.000       0.000         0.003         0.001
Total Solar                           17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
     150.       118.       268.     1.65     1.30     2.95     0.000    0.000
 0.000       0.000       0.105         0.000         0.000
Total Fossil_Other                    19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                    20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
    4228.      3051.      7280.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
```

```
     704.       568.      1273.     5.84     4.71    10.55     0.922    0.744
 1.666       3.166       0.017         0.983         0.268
Total Cgn_Gas                        23
    4902.        37.      4939.    39.47     0.30    39.76     3.611    0.027
 3.638       0.000       0.000         2.110         0.576
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
     191.       147.       338.     2.55     1.97     4.52     0.000    0.000
 0.000       0.000       0.160         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.SCR+Scrb                    44
    1674.      1330.      3003.    17.77    14.12    31.89     0.444    0.353
 0.797       1.403       0.029         2.970         0.810
Total Ret.SNCR+Scrub                  45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                  46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR             47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub             48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI              50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI                51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI               52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                   53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR          54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                  55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR         56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                  57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub          58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub         59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI    60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI     61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI     62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI           63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI          64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                     65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total UPNY
   51413.     35770.     87183.   311.85   228.25   540.10    19.207   12.424
31.630      95.914       0.799        24.305         6.629
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: DSNY     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
```

3063. 2433. 5495. 31.73 25.20 56.94 5.923 4.704
10.628 28.935 0.094 5.302 1.446
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
7460. 7111. 14571. 76.44 72.70 149.14 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
1237. 824. 2061. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
8224. 6343. 14567. 61.76 47.76 109.52 0.639 0.526
1.164 0.000 0.000 5.813 1.585
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Biomass 12
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Wind 15
29. 16. 45. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
361. 285. 646. 3.98 3.14 7.11 0.000 0.000
0.000 0.000 0.252 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 155. 155. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Gas 23
256. 269. 525. 2.42 2.53 4.95 0.226 0.237
0.463 0.000 0.000 0.263 0.072
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
30. 23. 54. 0.13 0.10 0.23 0.000 0.000
0.000 0.000 0.008 0.000 0.000

Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total DSNY
   20661.     17460.     38120.   176.45   151.43   327.88     6.788    5.467
12.255      28.935       0.355        11.377         3.103
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: NYC      (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam                 5
    5809.      6523.     12332.    55.42    62.23   117.65     3.796    4.263
 8.059       0.000       0.000         6.244         1.703
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Hydro                          8
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    1647.      1277.      2924.    13.19    10.26    23.45     0.686    0.540
 1.226       0.000       0.000         1.244         0.339
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
     106.        93.       199.     1.16     1.05     2.21     0.046    0.046
 0.093       0.000       0.000         0.117         0.032
Total Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Wind                          15
      27.        15.        41.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
     209.       162.       372.     1.90     1.47     3.37     0.176    0.136
 0.313       0.000       0.000         0.179         0.049
Total Cgn_Oil                       24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other               28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret. Biomass Cofiring          69
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CT Early Retirement            70
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CC Early Retirement            71
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total O/G Early Retirement           72
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuke Early Retirement 74
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total NYC
7798. 8070. 15868. 71.66 75.01 146.68 4.705 4.985
9.689 0.000 0.000 7.784 2.123

(**) Industrial Boiler Generation in BBtu, not included in the total regional generation

---

NOx
SO2 MER CO2 Carbon
Year: 2010, Region: LILC (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Scrubbed Coal 2
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal 4
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam 5
119. 1084. 1203. 1.25 11.41 12.66 0.057 0.519
0.576 0.000 0.000 0.672 0.183
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
2175. 1614. 3789. 15.78 11.81 27.59 0.242 0.203
0.445 0.000 0.000 1.464 0.399
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
581. 1008. 1589. 6.58 11.40 17.97 0.297 0.505

0.802 0.000 0.000 0.954 0.260
Total Biomass 12
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Wind 15
16. 9. 25. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
604. 476. 1080. 6.64 5.24 11.88 0.000 0.000
0.000 0.000 0.355 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Gas 23
512. 354. 866. 4.52 3.18 7.70 0.406 0.285
0.691 0.000 0.000 0.409 0.111
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                    35
    1441.      1105.      2547.    10.41     7.98    18.39     0.104    0.080
 0.184       0.000       0.000         0.976         0.266
Total Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                  37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                       40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring          69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement            70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement            71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement           72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement          73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement          74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total LILC
    5447.      5651.     11098.    45.17    51.01    96.18     1.106    1.592
 2.698       0.000       0.355         4.474         1.220
-------------------------------------------------------------------------------
```

(**) Industrial Boiler Generation in BBtu, not included in the total regional generation

---

NOx
SO2 MER CO2 Carbon
Year: 2010, Region: NENG (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
324. 257. 581. 3.37 2.68 6.04 0.339 0.269
0.607 0.332 0.019 0.563 0.153
Total Scrubbed Coal 2
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal_NOx 3
667. 353. 1019. 6.91 3.65 10.56 0.890 0.432
1.322 6.944 0.031 0.983 0.268
Total Unscrubbed Coal 4
1439. 1143. 2582. 13.61 10.81 24.42 2.221 1.764
3.985 13.431 0.041 2.274 0.620
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
20103. 14417. 34520. 203.09 145.64 348.74 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
3489. 1724. 5212. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
36098. 26598. 62696. 273.39 201.45 474.84 4.080 3.001
7.081 0.000 0.000 25.200 6.873
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
10. 15. 25. 0.10 0.15 0.25 0.006 0.008
0.013 0.000 0.000 0.013 0.004
Total Biomass 12
950. 170. 1121. 8.69 1.55 10.24 0.087 0.015
0.102 0.409 0.003 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
303. 222. 526. 3.33 2.45 5.77 0.409 0.301
0.710 0.000 0.000 0.000 0.000
Total Wind 15

```
     319.       164.       483.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       1.         1.         1.     0.01     0.00     0.01     0.001    0.001
 0.002       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
    2367.      1867.      4234.    26.04    20.53    46.57     0.000    0.000
 0.000       0.000       1.647         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
     163.       292.       455.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
    5424.      3914.      9338.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
     824.       665.      1488.     7.62     6.15    13.77     1.072    0.865
 1.938       3.742       0.033         1.283         0.350
Total Cgn_Gas                       23
     526.       408.       934.     4.29     3.34     7.64     0.250    0.195
 0.445       0.000       0.000         0.405         0.111
Total Cgn_Oil                       24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
     429.       332.       761.     2.85     2.20     5.05     0.027    0.021
 0.047       0.189       0.010         0.000         0.000
Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other               28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                       31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                   34
     955.       732.      1687.     6.89     5.29    12.18     0.069    0.053
 0.122       0.000       0.000         0.646         0.176
Total Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.Scrubber                    37
     417.       332.       749.     4.11     3.26     7.37     0.485    0.385
 0.870       0.162       0.006         0.686         0.187
Total Ret.ExistSCR & Scrub            38
    1759.      1397.      3157.    17.34    13.77    31.11     0.858    0.682
 1.540       1.369       0.029         2.897         0.790
Total Ret.ExistSNCR & Scrub           39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                         40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR            41
     273.       221.       494.     2.65     2.14     4.78     0.066    0.053
 0.120       0.263       0.004         0.445         0.121
Total Ret.SNCR                        42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR           43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                    44
    4642.      3687.      8329.    44.39    35.26    79.65     1.110    0.881
 1.991       3.224       0.065         7.417         2.023
Total Ret.SNCR+Scrub                  45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                  46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR             47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub             48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI              50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI                51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI               52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                   53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR          54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                  55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR         56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                  57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub          58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NENG
   81481.     58910.    140391.   628.67   460.32  1089.00    11.969    8.926
20.895      30.065       1.888        42.814        11.677
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
```

NOx

```
             SO2         MER           CO2          Carbon
Year: 2010, Region: FRCC     (Emissions By Plant Type)
             Generation                   Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
    8931.      7093.     16024.    86.61    68.78   155.39     4.806    3.817
 8.623      14.398       0.057        14.470         3.946
Total Scrubbed Coal                  2
    2204.      1750.      3954.    22.77    18.09    40.86     4.244    3.370
 7.614      22.282       0.051         3.805         1.038
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
    4744.      3767.      8511.    46.13    36.64    82.77     8.490    6.743
15.233      41.385       0.112         7.708         2.102
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   18044.     13926.     31971.   197.40   152.44   349.84     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
      83.        38.       121.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
   38524.     38092.     76617.   298.58   295.96   594.55     7.621    7.660
15.281       0.000       0.000        31.553         8.605
Total IGCC                          10
    1083.       837.      1921.     7.88     6.09    13.97     0.394    0.305
 0.699       0.000       0.003         1.301         0.355
Total Turbine                       11
    1097.      3438.      4535.    12.02    37.82    49.85     0.495    1.584
 2.079       0.000       0.000         2.645         0.721
Total Biomass                       12
     234.       181.       415.     2.16     1.67     3.83     0.022    0.017
 0.038       0.153       0.001         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       9.         7.        16.     0.12     0.09     0.22     0.015    0.011
 0.026       0.000       0.000         0.000         0.000
Total Wind                          15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
    1869.      1474.      3343.    20.56    16.21    36.77     0.000    0.000
 0.000       0.000       1.120         0.000         0.000
```

Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
2643. 2133. 4777. 26.06 21.03 47.10 5.955 4.806
10.762 23.548 0.080 4.386 1.196
Total Cgn_Gas 23
210. 1506. 1715. 1.87 13.56 15.43 0.131 0.935
1.066 0.000 0.000 0.819 0.223
Total Cgn_Oil 24
0. 29. 29. 0.00 0.25 0.25 0.000 0.037
0.037 0.000 0.000 0.013 0.004
Total Cgn_Other 25
360. 278. 638. 2.99 2.31 5.30 0.023 0.017
0.040 0.160 0.001 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR          41
   17082.     13567.     30649.   167.76   133.24   301.00     4.252    3.377
 7.628      84.978       0.117        28.030         7.645
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
    5664.      4498.     10162.    54.04    42.92    96.96     1.378    1.094
 2.472      12.120       0.039         9.029         2.462
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total FRCC
  102780.     92616.    195397.   946.96   847.12  1794.09    37.825   33.774
71.599     199.024       1.582       103.760        28.298
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: VACA     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

```
Total Scrubbed Coal_NOx              1
   18838.     14961.     33799.   183.88   146.04   329.91     5.856    4.651
10.507      25.558       0.129        30.722         8.379
Total Scrubbed Coal                  2
    2743.      2179.      4922.    28.53    22.66    51.19     3.361    2.669
 6.030       4.389       0.034         4.767         1.300
Total Unscrubbed Coal_NOx            3
   23355.     17339.     40694.   226.75   168.20   394.95    10.801    7.739
18.541     241.172       0.652        36.779        10.031
Total Unscrubbed Coal                4
   18156.     13492.     31648.   182.72   136.53   319.24    34.825   26.260
61.085     189.839       0.591        29.729         8.108
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   67582.     52920.    120502.   691.30   541.78  1233.07     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    6437.      3139.      9575.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    2412.      3624.      6035.    18.56    28.41    46.97     0.374    0.662
 1.035       0.000       0.000         2.493         0.680
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
     317.      1485.      1802.     3.45    16.30    19.75     0.139    0.669
 0.807       0.000       0.000         1.048         0.286
Total Biomass                       12
     204.       157.       361.     1.88     1.45     3.33     0.019    0.015
 0.033       0.133       0.001         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
     112.        85.       197.     1.53     1.16     2.69     0.188    0.143
 0.331       0.000       0.000         0.000         0.000
Total Wind                          15
      20.        11.        31.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
     617.       487.      1104.     6.79     5.35    12.14     0.000    0.000
 0.000       0.000       0.431         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
    1953.      1410.      3363.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
    4557.      3677.      8234.    40.37    32.58    72.95     7.520    6.069
```

13.590 36.515 0.143 6.794 1.853
Total Cgn_Gas 23
1339. 2190. 3529. 10.06 16.77 26.83 0.346 0.415
0.761 0.000 0.000 1.424 0.388
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
191. 147. 338. 1.44 1.11 2.55 0.013 0.010
0.022 0.089 0.012 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
10827. 8599. 19427. 100.51 79.83 180.34 2.797 2.222
5.019 12.178 0.172 16.794 4.580
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
574. 456. 1029. 5.98 4.75 10.72 0.182 0.145
0.327 5.897 0.018 0.998 0.272
Total Ret.ExistScrub & SCR 41
1121. 890. 2011. 11.07 8.79 19.86 0.315 0.251
0.566 1.400 0.005 1.850 0.504
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44

```
   17101.     13582.     30683.   162.37   128.95   291.32     4.070    3.233
 7.303       8.740       0.074        27.129         7.399
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total VACA
  178454.    140830.    319284.  1677.18  1340.66  3017.84    70.807   55.152  1
25.958     525.910       2.262       160.526        43.780
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: TVA      (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
   24905.     19780.     44685.   243.93   193.74   437.67     8.535    6.779
15.314      54.709       0.176        40.757        11.116
Total Scrubbed Coal                 2
     515.       409.       923.     5.48     4.35     9.83     1.222    0.971
 2.192       2.950       0.002         0.916         0.250
Total Unscrubbed Coal_NOx           3
    9039.      7179.     16218.    88.00    69.89   157.88     2.360    1.874
 4.234     105.026       0.308        14.703         4.010
Total Unscrubbed Coal               4
   19746.     14800.     34547.   201.66   150.49   352.15    38.892   29.061
```

67.953 192.011 0.447 32.793 8.944
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
31636. 24741. 56376. 329.07 257.13 586.20 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
11469. 6255. 17724. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
1840. 1567. 3406. 13.80 11.75 25.55 0.138 0.118
0.255 0.000 0.000 1.356 0.370
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
0. 265. 265. 0.00 2.90 2.90 0.000 0.116
0.116 0.000 0.000 0.154 0.042
Total Biomass 12
4. 3. 8. 0.04 0.03 0.07 0.000 0.000
0.001 0.003 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
9. 7. 16. 0.12 0.09 0.22 0.015 0.011
0.026 0.000 0.000 0.000 0.000
Total Wind 15
2. 1. 3. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
53. 42. 95. 0.58 0.46 1.04 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
316. 588. 904. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Gas 23
901. 664. 1565. 6.75 4.98 11.74 0.068 0.050
0.117 0.000 0.000 0.623 0.170
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
    5469.      4343.      9812.    51.67    41.04    92.70     1.033    0.820
 1.853      11.588       0.037         8.633         2.354
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
    2893.      2298.      5190.    30.21    23.99    54.20     0.755    0.600
 1.355       3.252       0.019         5.047         1.376
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total TVA
  108797.     82941.    191738.   971.31   760.84  1732.15    53.018   40.400
93.418     369.538       0.989       104.980        28.631
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: SOU      (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
     423.       336.       760.     4.90     3.90     8.80     0.839    0.666
 1.505       0.397       0.009         0.820         0.224
Total Unscrubbed Coal_NOx           3
   28196.     22394.     50590.   267.16   212.18   479.34     5.502    4.370
 9.872     302.359       0.742        44.638        12.174
Total Unscrubbed Coal               4
   43883.     35492.     79375.   427.37   346.61   773.98    81.214   65.837  1
47.052     438.403       1.236        72.075        19.657
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
   25980.     20072.     46052.   283.85   219.39   503.25     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
```

```
    6138.      2706.      8844.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                  9
   36895.     24016.     60911.   277.02   180.35   457.37     2.887    1.882
 4.769       0.000       0.000        24.273         6.620
Total IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                        11
       0.      2117.      2117.     0.00    23.10    23.10     0.000    0.924
 0.924       0.000       0.000         1.226         0.334
Total Biomass                        12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                   14
      40.        31.        71.     0.55     0.42     0.97     0.068    0.052
 0.119       0.000       0.000         0.000         0.000
Total Wind                           15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                      16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
       0.       635.       635.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
       4.         3.         7.     0.04     0.03     0.07     0.007    0.006
 0.013       0.036       0.000         0.006         0.002
Total Cgn_Gas                        23
    1912.      3140.      5052.    14.51    24.05    38.56     0.207    0.390
 0.597       0.000       0.000         2.046         0.558
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
      22.        17.        38.     0.19     0.14     0.33     0.002    0.001
 0.003       0.013       0.000         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Blr_Gas                          30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                          31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                        32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                  33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                      34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                       35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                    36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                     37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub             38
    2994.      2378.      5373.    29.21    23.20    52.41     0.584    0.464
 1.048       4.699       0.041         4.880         1.331
Total Ret.ExistSNCR & Scrub            39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                          40
    4906.      3896.      8802.    47.20    37.49    84.68     1.434    1.139
 2.573      44.695       0.128         7.886         2.151
Total Ret.ExistScrub & SCR             41
    3619.      2874.      6493.    37.99    30.17    68.16     0.950    0.754
 1.704      16.849       0.023         6.348         1.731
Total Ret.SNCR                         42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR            43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                     44
   13619.     10817.     24436.   136.57   108.47   245.03     3.514    2.791
 6.305      18.378       0.136        22.818         6.223
Total Ret.SNCR+Scrub                   45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                   46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR              47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub              48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                          49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI               50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI                 51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring          69
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement            70
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement            71
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement           72
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement          73
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total SOU
  168631.    130926.    299557.  1526.56  1209.50  2736.05    97.209   79.277  1
76.486     825.829       2.315       187.016        51.004
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: ENTG     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx           3
    4814.      3824.      8638.    48.38    38.43    86.81     1.766    1.403
 3.169      20.400       0.114         8.084         2.205
Total Unscrubbed Coal               4
   19929.     15828.     35757.   203.80   161.86   365.67    31.492   25.011
56.503     139.865       1.088        35.136         9.583
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
   23812.     17693.     41505.   264.13   196.39   460.52     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
     646.       474.      1120.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                9
    8091.     19942.     28033.    60.68   149.62   210.30     0.607    1.506
 2.112       0.000       0.000        11.161         3.044
Total IGCC                         10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                      11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Biomass 12
43. 33. 77. 0.40 0.31 0.71 0.004 0.003
0.007 0.028 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
27. 20. 47. 0.37 0.28 0.65 0.045 0.034
0.079 0.000 0.000 0.000 0.000
Total Wind 15
57. 32. 88. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
137. 108. 244. 1.50 1.19 2.69 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Gas 23
6444. 2461. 8906. 48.33 18.33 66.66 0.483 0.215
0.698 0.000 0.000 3.538 0.965
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
795. 607. 1402. 4.81 3.67 8.49 0.942 0.719
1.661 0.021 0.083 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
    1868.       1483.       3351.    18.84    14.96    33.81     0.537    0.426
 0.963       7.945       0.106         3.262         0.890
Total Ret.ExistScrub & SCR           41
    2781.       2208.       4989.    27.95    22.19    50.14     0.699    0.555
 1.254       5.616       0.055         4.837         1.319
Total Ret.SNCR                       42
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
    3311.       2630.       5941.    36.32    28.85    65.17     0.908    0.721
 1.629       4.888       0.106         6.069         1.655
Total Ret.SNCR+Scrub                 45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total ENTG
   72754.     67344.    140098.   715.51   636.08  1351.60    37.483   30.593
68.076     178.762       1.553        72.086        19.660
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
```

(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2010, Region: SPPN (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
4524. 3593. 8116. 43.72 34.72 78.45 0.464 0.369
0.833 7.482 0.121 7.447 2.031
Total Scrubbed Coal 2
22028. 17434. 39462. 234.02 185.17 419.19 51.889 41.072
92.961 40.084 0.986 40.100 10.936
Total Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal 4
6767. 4985. 11752. 72.62 53.41 126.03 17.548 12.918
30.465 51.286 0.229 11.859 3.234
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
5668. 4084. 9752. 55.33 39.87 95.20 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
601. 418. 1020. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
650. 1690. 2340. 4.88 12.67 17.55 0.049 0.127
0.176 0.000 0.000 0.931 0.254
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
0. 1114. 1114. 0.00 12.53 12.53 0.000 0.614
0.614 0.000 0.000 0.665 0.181
Total Biomass 12
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Wind 15
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
32. 37. 69. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Gas 23
0. 8. 8. 0.00 0.08 0.08 0.000 0.003
0.003 0.000 0.000 0.005 0.001
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                       40
    2352.      1547.      3900.    23.99    15.73    39.71     0.778    0.512
 1.290      19.857       0.077         3.743         1.021
Total Ret.ExistScrub & SCR          41
     288.       229.       517.     2.80     2.23     5.03     0.070    0.056
 0.126       0.744       0.006         0.485         0.132
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total SPPN
   42911.     35139.     78050.   437.36   356.41   793.78    70.798   55.671  1
26.468     119.453       1.419        65.235        17.791
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
              SO2         MER           CO2          Carbon
```

Year: 2010, Region: SPPS (Emissions By Plant Type)

	Generation			Trillion			Emission			Emission			Emission		
	(GWh)			(Btu)			(1000 Tons)			(1000 Tons)			(Tons)		
	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total
Total Scrubbed Coal_NOx	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Scrubbed Coal	2158.	1714.	3872.	23.20	18.43	41.63	3.608	2.865	6.473	3.876	0.091	4.016	1.095		
Total Unscrubbed Coal_NOx	2034.	1615.	3649.	21.76	17.28	39.03	4.938	3.922	8.861	14.247	0.123	3.766	1.027		
Total Unscrubbed Coal	26422.	20985.	47407.	265.11	210.56	475.66	47.938	38.073	86.011	165.252	1.192	45.885	12.514		
Total Oil/Gas Steam	0.	3399.	3399.	0.00	33.84	33.84	0.000	4.805	4.805	0.000	0.000	1.796	0.490		
Total Oil/Gas Steam_Nox	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Nuclear	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Hydro	4702.	3448.	8150.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Comb.Cycle Gas	23838.	25908.	49746.	179.74	196.19	375.93	2.305	2.825	5.131	0.000	0.000	19.951	5.441		
Total IGCC	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Turbine	0.	399.	399.	0.00	4.91	4.91	0.000	0.230	0.230	0.000	0.000	0.261	0.071		
Total Biomass	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Geothermal	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Landfill Gas	40.	31.	71.	0.55	0.42	0.97	0.068	0.052	0.119	0.000	0.000	0.000	0.000		
Total Wind	66.	37.	102.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Fuel Cell	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Solar	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Non Fossil_Other	101.	80.	181.	0.48	0.38	0.87	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Fossil_Other															

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
       0.        43.        43.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
    1243.      1003.      2246.    10.63     8.57    19.20     2.067    1.668
 3.734       9.600       0.033         1.788         0.488
Total Cgn_Gas                        23
    4080.      3337.      7417.    30.71    25.57    56.29     0.329    0.378
 0.706       0.000       0.000         2.987         0.815
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
     156.       121.       277.     0.66     0.51     1.17     0.001    0.001
 0.001       0.005       0.000         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
    9062.      7198.     16260.    94.81    75.30   170.11     2.370    1.882
 4.253       5.103       0.043        15.841         4.320
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total SPPS
   73903.     69317.    143220.   627.65   591.96  1219.61    63.623   56.701  1
20.324     198.083       1.481        96.290        26.261
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: CALI     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
     710.       564.      1273.     7.79     6.19    13.97     0.802    0.637
 1.438       6.987       0.029         1.301         0.355
Total Oil/Gas Steam                  5
   13788.      6834.     20622.   131.46    65.17   196.63     1.315    0.652
 1.966       0.000       0.000        10.435         2.846
Total Oil/Gas Steam_Nox              6
       0.       134.       134.     0.00     1.29     1.29     0.000    0.008
 0.008       0.000       0.000         0.068         0.019
Total Nuclear                        7
   20010.     15089.     35099.   204.17   153.43   357.60     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
   16750.     17655.     34405.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
   26495.     20381.     46875.   200.02   154.10   354.11     2.046    1.575
 3.621       0.000       0.000        18.793         5.125
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
     167.       505.       672.     1.53     5.31     6.84     0.078    0.225
 0.303       0.000       0.000         0.363         0.099
Total Biomass                       12
    1872.      1447.      3319.    17.09    13.21    30.30     0.171    0.132
 0.303       1.212       0.009         0.000         0.000
Total Geothermal                    13
   11344.      8966.     20310.   291.69   230.53   522.21     0.000    0.000
 0.000       0.000       0.775         0.000         0.000
Total Landfill Gas                  14
     966.       737.      1703.    12.24     9.34    21.58     1.506    1.148
 2.654       0.000       0.000         0.000         0.000
Total Wind                          15
    4635.      2599.      7234.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
     516.       274.       790.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
     785.       619.      1403.     9.00     7.10    16.10     0.000    0.000
 0.000       0.000       0.225         0.000         0.000
Total Fossil_Other                  19
      89.        68.       158.     0.98     0.75     1.73     0.064    0.049
 0.114       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.       386.       386.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
    1356.      1094.      2450.    12.37     9.98    22.36     0.557    0.449
 1.006      10.319       0.041         2.082         0.568
```

```
Total Cgn_Gas                        23
   24815.     16346.     41161.   212.94   136.25   349.19     4.480    2.190
 6.670       0.000       0.000        18.532          5.054
Total Cgn_Oil                        24
    1741.      1405.      3145.    13.16    10.62    23.79     0.099    0.080
 0.178       0.000       0.000         1.262          0.344
Total Cgn_Other                      25
     576.       444.      1020.     4.10     3.16     7.26     0.078    0.060
 0.139       0.210       0.016         0.000          0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Rep.O/G-CC                     35
   18946.     14532.     33478.   136.79   104.92   241.71     1.368    1.049
 2.417       0.000       0.000        12.828          3.498
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                 45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total CALI
  145560.    110078.    255638.  1255.35   911.34  2166.68    12.564    8.254
20.818      18.728       1.093        65.665        17.909
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: PNW      (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
    5561.      4417.      9978.    56.95    45.23   102.17    11.389    9.046
20.435       5.364       0.237         9.858         2.688
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    2212.      1757.      3969.    23.92    19.00    42.93     5.280    4.194
 9.474      15.782       0.095         4.135         1.128
```

```
Total Oil/Gas Steam                    5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox                6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                          7
    5713.      3138.      8851.    57.49    31.58    89.07     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                            8
   63340.     47747.    111087.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                   9
   20464.     15388.     35852.   154.31   116.18   270.48     2.728    2.070
 4.798       0.000       0.000        14.355         3.915
Total IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                         11
    6909.      5271.     12180.    74.42    56.77   131.19     3.361    2.564
 5.925       0.000       0.000         6.962         1.899
Total Biomass                         12
      26.        20.        46.     0.21     0.16     0.37     0.002    0.002
 0.004       0.015       0.000         0.000         0.000
Total Geothermal                      13
      34.        27.        61.     1.10     0.87     1.97     0.000    0.000
 0.000       0.000       0.004         0.000         0.000
Total Landfill Gas                    14
      94.        72.       166.     1.28     0.98     2.26     0.158    0.120
 0.278       0.000       0.000         0.000         0.000
Total Wind                            15
     185.       104.       290.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                           17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
     256.       202.       457.     2.81     2.22     5.03     0.000    0.000
 0.000       0.000       0.102         0.000         0.000
Total Fossil_Other                    19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                    20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
    6533.      4715.     11248.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                         23
    5024.      3854.      8878.    39.24    30.10    69.33     1.126    0.864
 1.989       0.000       0.000         3.680         1.004
Total Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
     416.       321.       738.     3.55     2.75     6.30     0.036    0.027
 0.063       0.252       0.002         0.000         0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
     421.        323.        744.     3.04     2.33     5.37     0.030    0.023
 0.054       0.000       0.000         0.285         0.078
Total Rep.Coal-IGCC                  36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                 45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                          49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI               50
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI                 51
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI                52
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                    53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR           54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                   55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR          56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                   57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub           58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub          59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI     60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI      61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI      62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI            63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI           64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                      65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                     66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 30+10 yrs)      67
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 40+20 yrs)      68
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret. Biomass Cofiring            69
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

```
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total PNW
  117188.     87355.    204543.   418.32   308.16   726.49    24.110   18.910
43.020      21.413       0.440        39.275        10.711
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: AZNM     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
   38509.     30585.     69094.   393.98   312.91   706.89    88.795   70.523  1
59.318      85.093       1.083        66.866        18.236
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    1726.      1371.      3098.    17.84    14.17    32.00     3.766    2.991
 6.757      12.432       0.033         2.980         0.813
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
   16759.     13773.     30532.   176.42   144.93   321.35     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
    3484.      3538.      7022.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                  9
   36471.     27496.     63967.   274.74   207.74   482.48     3.299    2.676
 5.975       0.000       0.000        25.605         6.983
Total IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                        11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Biomass                        12
     189.       140.       329.     1.53     1.14     2.67     0.015    0.011
 0.027       0.107       0.001         0.000         0.000
Total Geothermal                     13
     756.       554.      1310.    24.49    17.94    42.43     0.000    0.000
 0.000       0.000       0.078         0.000         0.000
Total Landfill Gas                   14
      74.        56.       130.     0.92     0.69     1.62     0.113    0.085
 0.199       0.000       0.000         0.000         0.000
Total Wind                           15
     393.       207.       600.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                      16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                          17
      21.        15.        36.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
      22.        46.        67.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                        23
     331.      2204.      2534.     2.61    17.28    19.89     0.081    0.496
 0.577       0.000       0.000         1.055         0.288
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Oil                          31
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Other                        32
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total SteamOnly Cogen                  33
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-CC                      34
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.O/G-CC                       35
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-IGCC                    36
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Scrubber                     37
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR & Scrub             38
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR & Scrub            39
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR                          40
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SCR             41
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR                         42
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SNCR            43
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR+Scrb                     44
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR+Scrub                   45
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Gas Reburn                   46
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR              47
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub              48
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                          49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI               50
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI                 51
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total AZNM
   98735.     79984.    178719.   892.53   716.80  1609.33    96.070   76.783  1
72.853      97.632       1.195        96.507        26.320
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Region: RMPA     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
     332.       264.       596.     2.99     2.37     5.36     0.164    0.131
 0.295       0.237       0.001         0.499         0.136
Total Scrubbed Coal                 2
   17256.     13705.     30962.   180.44   143.31   323.75    33.663   26.736
60.398      25.494       0.342        30.503         8.319
Total Unscrubbed Coal_NOx           3
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    8167.       6487.     14654.    85.70    68.07   153.77    21.904   17.397
39.301      52.468       0.113        14.642         3.993
Total Oil/Gas Steam                 5
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
    3767.       3826.      7592.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                9
    3561.        436.      3998.    27.05     3.31    30.36     0.419    0.051
 0.471       0.000       0.000         1.611         0.439
Total IGCC                         10
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                      11
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Biomass                      12
```

```
       4.         3.         8.     0.03     0.03     0.06     0.000    0.000
 0.001       0.002       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       4.         3.         8.     0.06     0.05     0.11     0.008    0.006
 0.013       0.000       0.000         0.000         0.000
Total Wind                          15
     648.       363.      1011.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       5.         3.         7.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
      24.         0.        24.     0.20     0.00     0.20     0.011    0.000
 0.011       0.000       0.000         0.011         0.003
Total Cgn_Oil                       24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
      30.        23.        54.     0.24     0.19     0.43     0.002    0.002
 0.004       0.017       0.000         0.000         0.000
Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other               28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                       31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total RMPA
   33800.     25114.     58913.   296.72   217.33   514.05    56.172   44.322  1
00.494      78.218       0.457        47.267        12.891
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2010, Region: NWPE (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Scrubbed Coal 2
43487. 33158. 76645. 444.94 339.15 784.10 93.567 71.542 1
65.109 46.158 0.760 73.759 20.116
Total Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal 4
7819. 6210. 14029. 80.57 63.99 144.57 17.408 13.826
31.234 57.684 0.211 13.624 3.716
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
2460. 2498. 4958. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
169. 41. 211. 1.27 0.31 1.58 0.013 0.003
0.016 0.000 0.000 0.084 0.023
Total IGCC 10
433. 335. 768. 3.15 2.44 5.59 0.095 0.073
0.168 0.000 0.001 0.520 0.142
Total Turbine 11
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Biomass 12
22. 17. 38. 0.17 0.13 0.31 0.002 0.001
0.003 0.012 0.000 0.000 0.000
Total Geothermal 13
1026. 811. 1837. 32.60 25.77 58.37 0.000 0.000
0.000 0.000 0.106 0.000 0.000
Total Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Wind 15
62. 35. 97. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
38. 20. 59. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
183. 140. 323. 2.02 1.54 3.56 0.706 0.538
1.244 0.012 0.018 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
223. 180. 402. 1.81 1.46 3.28 0.325 0.263
0.588 1.638 0.007 0.316 0.086
Total Cgn_Gas 23
45. 26. 71. 0.29 0.17 0.45 0.021 0.012
0.033 0.000 0.000 0.024 0.007
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
43. 33. 77. 0.18 0.14 0.32 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NWPE
   56011.     43503.     99514.   567.02   435.10  1002.12   112.136   86.258  1
98.395     105.504       1.104        88.327        24.089
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

```
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Scrubbed Coal_NOx              1         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Scrubbed Coal_NOx              1
      83.        66.       149.     0.86     0.69     1.55     0.168    0.134
 0.302       0.258       0.000         0.144         0.039
ECAO    Scrubbed Coal_NOx              1
   40142.     31699.     71841.   395.14   311.67   706.81    13.174   10.042
23.216      90.913       0.400        65.820        17.951
ERCT    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Scrubbed Coal_NOx              1
    3905.      2598.      6503.    37.21    24.76    61.97     3.087    2.054
 5.142       6.957       0.271         5.771         1.574
MACW    Scrubbed Coal_NOx              1
    4856.      3856.      8712.    45.81    36.39    82.20     0.701    0.556
 1.257       6.960       0.058         7.655         2.088
MACS    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Scrubbed Coal_NOx              1
     249.       198.       447.     2.49     1.97     4.46     0.257    0.204
 0.460       0.557       0.001         0.415         0.113
MAPP    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Scrubbed Coal_NOx              1
    3453.      2742.      6195.    31.97    25.39    57.35     0.671    0.533
 1.204       6.333       0.053         5.341         1.457
DSNY    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Scrubbed Coal_NOx              1
     324.       257.       581.     3.37     2.68     6.04     0.339    0.269
 0.607       0.332       0.019         0.563         0.153
FRCC    Scrubbed Coal_NOx              1
    8931.      7093.     16024.    86.61    68.78   155.39     4.806    3.817
 8.623      14.398       0.057        14.470         3.946
VACA    Scrubbed Coal_NOx              1
   18838.     14961.     33799.   183.88   146.04   329.91     5.856    4.651
10.507      25.558       0.129        30.722         8.379
TVA     Scrubbed Coal_NOx              1
   24905.     19780.     44685.   243.93   193.74   437.67     8.535    6.779
15.314      54.709       0.176        40.757        11.116
SOU     Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
ENTG    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Scrubbed Coal_NOx              1
    4524.      3593.      8116.    43.72    34.72    78.45     0.464    0.369
 0.833       7.482       0.121         7.447         2.031
SPPS    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Scrubbed Coal_NOx              1
     332.       264.       596.     2.99     2.37     5.36     0.164    0.131
 0.295       0.237       0.001         0.499         0.136
NWPE    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Scrubbed Coal_NOx              1
  110541.     87108.    197649.  1077.97   849.19  1927.16    38.223   29.539
67.762     214.694       1.285       179.604        48.983
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Scrubbed Coal                 2         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Scrubbed Coal                  2
     444.       318.       761.     5.00     3.59     8.60     0.781    0.563
 1.344       0.400       0.010         0.801         0.218
ECAO    Scrubbed Coal                  2
    7355.      5765.     13120.    74.71    58.48   133.19    15.032   11.743
26.775      21.933       0.233        12.403         3.383
ERCT    Scrubbed Coal                  2
   17327.     18650.     35977.   184.92   201.26   386.18    29.105   31.384
60.489     119.034       0.978        37.625        10.261
MACE    Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Scrubbed Coal                  2
     133.       105.       238.     1.38     1.10     2.48     0.277    0.220
 0.497       0.654       0.009         0.231         0.063
MACS    Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
WUMS    Scrubbed Coal                   2
     522.       363.       886.     5.72     4.01     9.73     0.885    0.624
 1.509       4.071       0.007         0.906         0.247
MANO    Scrubbed Coal                   2
    1602.      1272.      2874.    17.47    13.87    31.34     3.889    3.089
 6.979       8.547       0.055         2.918         0.796
MAPP    Scrubbed Coal                   2
   27441.     20467.     47907.   294.25   219.29   513.54    56.931   42.223
99.154      88.846       1.307        49.684        13.550
UPNY    Scrubbed Coal                   2
     618.       491.      1109.     5.85     4.64    10.49     1.228    0.975
 2.203       1.049       0.014         0.977         0.266
DSNY    Scrubbed Coal                   2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Scrubbed Coal                   2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Scrubbed Coal                   2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Scrubbed Coal                   2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Scrubbed Coal                   2
    2204.      1750.      3954.    22.77    18.09    40.86     4.244    3.370
 7.614      22.282       0.051         3.805         1.038
VACA    Scrubbed Coal                   2
    2743.      2179.      4922.    28.53    22.66    51.19     3.361    2.669
 6.030       4.389       0.034         4.767         1.300
TVA     Scrubbed Coal                   2
     515.       409.       923.     5.48     4.35     9.83     1.222    0.971
 2.192       2.950       0.002         0.916         0.250
SOU     Scrubbed Coal                   2
     423.       336.       760.     4.90     3.90     8.80     0.839    0.666
 1.505       0.397       0.009         0.820         0.224
ENTG    Scrubbed Coal                   2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Scrubbed Coal                   2
   22028.     17434.     39462.   234.02   185.17   419.19    51.889   41.072
92.961      40.084       0.986        40.100        10.936
SPPS    Scrubbed Coal                   2
    2158.      1714.      3872.    23.20    18.43    41.63     3.608    2.865
 6.473       3.876       0.091         4.016         1.095
CALI    Scrubbed Coal                   2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Scrubbed Coal                   2
    5561.      4417.      9978.    56.95    45.23   102.17    11.389    9.046
20.435       5.364       0.237         9.858         2.688
AZNM    Scrubbed Coal                   2
   38509.     30585.     69094.   393.98   312.91   706.89    88.795   70.523  1
59.318      85.093       1.083        66.866        18.236
RMPA    Scrubbed Coal                   2
   17256.     13705.     30962.   180.44   143.31   323.75    33.663   26.736
60.398      25.494       0.342        30.503         8.319
NWPE    Scrubbed Coal                   2
   43487.     33158.     76645.   444.94   339.15   784.10    93.567   71.542  1
65.109      46.158       0.760        73.759        20.116

Total Scrubbed Coal                   2
  190326.    153119.    343445.  1984.52  1599.45  3583.98   400.704  320.281  7
20.986     480.620       6.209       340.955        92.988
```


NOx
SO2 MER CO2 Carbon
Year: 2010, Plant Type: Unscrubbed Coal_NOx 3 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Unscrubbed Coal_NOx 3
12533. 9954. 22488. 115.39 91.65 207.04 2.171 1.725
3.896 103.521 0.456 19.970 5.446
ECAO Unscrubbed Coal_NOx 3
17779. 12807. 30585. 170.52 122.67 293.19 14.388 10.557
24.944 194.391 0.538 27.303 7.446
ERCT Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Unscrubbed Coal_NOx 3
5414. 4023. 9437. 55.06 40.81 95.86 5.517 4.065
9.582 52.725 0.162 8.927 2.435
MACW Unscrubbed Coal_NOx 3
473. 288. 761. 4.71 2.87 7.58 0.881 0.537
1.418 4.171 0.013 0.706 0.193
MACS Unscrubbed Coal_NOx 3
1321. 1049. 2370. 13.48 10.71 24.19 3.411 2.709
6.120 18.143 0.017 2.253 0.614
WUMS Unscrubbed Coal_NOx 3
219. 174. 392. 2.35 1.86 4.21 0.526 0.418
0.944 1.441 0.009 0.406 0.111
MANO Unscrubbed Coal_NOx 3
1015. 619. 1634. 9.91 6.04 15.95 1.462 0.891
2.353 5.424 0.050 1.539 0.420
MAPP Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Unscrubbed Coal_NOx 3
1502. 1193. 2696. 14.92 11.85 26.77 1.768 1.404
3.171 17.183 0.073 2.492 0.680
DSNY Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Unscrubbed Coal_NOx 3
667. 353. 1019. 6.91 3.65 10.56 0.890 0.432
1.322 6.944 0.031 0.983 0.268
FRCC Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
VACA    Unscrubbed Coal_NOx            3
   23355.     17339.     40694.   226.75   168.20   394.95    10.801    7.739
18.541     241.172       0.652        36.779        10.031
TVA     Unscrubbed Coal_NOx            3
    9039.      7179.     16218.    88.00    69.89   157.88     2.360    1.874
 4.234     105.026       0.308        14.703         4.010
SOU     Unscrubbed Coal_NOx            3
   28196.     22394.     50590.   267.16   212.18   479.34     5.502    4.370
 9.872     302.359       0.742        44.638        12.174
ENTG    Unscrubbed Coal_NOx            3
    4814.      3824.      8638.    48.38    38.43    86.81     1.766    1.403
 3.169      20.400       0.114         8.084         2.205
SPPN    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Unscrubbed Coal_NOx            3
    2034.      1615.      3649.    21.76    17.28    39.03     4.938    3.922
 8.861      14.247       0.123         3.766         1.027
CALI    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Unscrubbed Coal_NOx            3
  108360.     82811.    191171.  1045.30   798.08  1843.38    56.382   42.046
98.428    1087.145       3.288       172.549        47.059
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Unscrubbed Coal                4         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Unscrubbed Coal                4
   25544.     18702.     44246.   251.61   184.01   435.63    41.855   30.570
72.425     202.435       0.772        41.301        11.264
ECAO    Unscrubbed Coal                4
   43144.     29919.     73063.   435.32   301.19   736.51    87.972   60.337  1
48.308     432.255       1.438        68.824        18.770
ERCT    Unscrubbed Coal                4
    7437.      5907.     13344.    71.94    57.14   129.08    11.191    8.888
```

20.079 45.628 0.334 12.303 3.355
MACE Unscrubbed Coal 4
992. 776. 1768. 10.13 7.91 18.04 1.959 1.536
3.495 9.923 0.025 1.680 0.458
MACW Unscrubbed Coal 4
9470. 6906. 16376. 91.40 66.47 157.88 18.486 13.417
31.902 88.101 0.280 14.702 4.010
MACS Unscrubbed Coal 4
2735. 1794. 4529. 25.97 17.02 42.99 4.841 3.167
8.008 30.728 0.155 4.003 1.092
WUMS Unscrubbed Coal 4
21090. 15743. 36833. 219.38 163.43 382.81 36.275 27.062
63.337 155.740 0.847 36.523 9.961
MANO Unscrubbed Coal 4
39385. 27916. 67301. 397.27 281.41 678.68 60.148 42.636 1
02.784 282.096 1.499 64.737 17.656
MAPP Unscrubbed Coal 4
33718. 24154. 57872. 357.41 255.66 613.07 73.076 53.026 1
26.101 265.187 1.401 58.586 15.978
UPNY Unscrubbed Coal 4
5449. 4328. 9777. 56.43 44.82 101.25 10.503 8.342
18.845 66.728 0.346 9.429 2.572
DSNY Unscrubbed Coal 4
3063. 2433. 5495. 31.73 25.20 56.94 5.923 4.704
10.628 28.935 0.094 5.302 1.446
NYC Unscrubbed Coal 4
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Unscrubbed Coal 4
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Unscrubbed Coal 4
1439. 1143. 2582. 13.61 10.81 24.42 2.221 1.764
3.985 13.431 0.041 2.274 0.620
FRCC Unscrubbed Coal 4
4744. 3767. 8511. 46.13 36.64 82.77 8.490 6.743
15.233 41.385 0.112 7.708 2.102
VACA Unscrubbed Coal 4
18156. 13492. 31648. 182.72 136.53 319.24 34.825 26.260
61.085 189.839 0.591 29.729 8.108
TVA Unscrubbed Coal 4
19746. 14800. 34547. 201.66 150.49 352.15 38.892 29.061
67.953 192.011 0.447 32.793 8.944
SOU Unscrubbed Coal 4
43883. 35492. 79375. 427.37 346.61 773.98 81.214 65.837 1
47.052 438.403 1.236 72.075 19.657
ENTG Unscrubbed Coal 4
19929. 15828. 35757. 203.80 161.86 365.67 31.492 25.011
56.503 139.865 1.088 35.136 9.583
SPPN Unscrubbed Coal 4
6767. 4985. 11752. 72.62 53.41 126.03 17.548 12.918
30.465 51.286 0.229 11.859 3.234
SPPS Unscrubbed Coal 4
26422. 20985. 47407. 265.11 210.56 475.66 47.938 38.073
86.011 165.252 1.192 45.885 12.514
CALI Unscrubbed Coal 4
710. 564. 1273. 7.79 6.19 13.97 0.802 0.637
1.438 6.987 0.029 1.301 0.355
PNW Unscrubbed Coal 4
2212. 1757. 3969. 23.92 19.00 42.93 5.280 4.194
9.474 15.782 0.095 4.135 1.128
AZNM Unscrubbed Coal 4
1726. 1371. 3098. 17.84 14.17 32.00 3.766 2.991
6.757 12.432 0.033 2.980 0.813
RMPA Unscrubbed Coal 4

8167. 6487. 14654. 85.70 68.07 153.77 21.904 17.397
39.301 52.468 0.113 14.642 3.993
NWPE Unscrubbed Coal 4
7819. 6210. 14029. 80.57 63.99 144.57 17.408 13.826
31.234 57.684 0.211 13.624 3.716

Total Unscrubbed Coal 4
353750. 265457. 619207. 3577.46 2682.58 6260.04 664.008 498.396 11
62.404 2984.580 12.607 591.532 161.327

NOx
SO2 MER CO2 Carbon
Year: 2010, Plant Type: Oil/Gas Steam 5 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Oil/Gas Steam 5
1053. 570. 1623. 10.10 5.46 15.56 1.005 0.544
1.548 0.000 0.000 0.826 0.225
ECAO Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Oil/Gas Steam 5
2971. 20376. 23348. 29.30 203.76 233.05 5.790 29.167
34.958 0.000 0.000 12.368 3.373
MACE Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Oil/Gas Steam 5
5809. 6523. 12332. 55.42 62.23 117.65 3.796 4.263
8.059 0.000 0.000 6.244 1.703

```
LILC    Oil/Gas Steam                   5
     119.      1084.      1203.     1.25    11.41    12.66     0.057    0.519
 0.576       0.000       0.000         0.672         0.183
NENG    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Oil/Gas Steam                   5
       0.      3399.      3399.     0.00    33.84    33.84     0.000    4.805
 4.805       0.000       0.000         1.796         0.490
CALI    Oil/Gas Steam                   5
   13788.      6834.     20622.   131.46    65.17   196.63     1.315    0.652
 1.966       0.000       0.000        10.435         2.846
PNW     Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Oil/Gas Steam                 5
   23740.     38787.     62527.   227.52   381.86   609.38    11.963   39.949
51.912       0.000       0.000        32.340         8.820
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Oil/Gas Steam_Nox              6         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
               (GWh)                            (Btu)                  (1000 Tons)
          (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

```
MECS    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Oil/Gas Steam_Nox              6
     420.      1686.      2106.     4.07    16.69    20.76     0.313    1.128
 1.441       0.000       0.000         1.102         0.301
MACE    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Oil/Gas Steam_Nox              6
```

```
       0.       134.       134.     0.00     1.29     1.29     0.000    0.008
 0.008       0.000       0.000         0.068         0.019
PNW     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Oil/Gas Steam_Nox              6
     420.      1820.      2240.     4.07    17.97    22.05     0.313    1.136
 1.449       0.000       0.000         1.170         0.319
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Nuclear                        7         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Nuclear                        7
    4676.      4072.      8748.    60.17    52.40   112.57     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Nuclear                        7
   22310.     14698.     37008.   234.04   153.98   388.02     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Nuclear                        7
   22733.     17771.     40504.   237.70   185.63   423.33     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Nuclear                        7
   40007.     29348.     69355.   425.28   312.14   737.41     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Nuclear                        7
   14951.      9693.     24644.   159.13   103.35   262.48     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Nuclear                        7
    8494.      5572.     14066.    92.30    60.55   152.85     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Nuclear                        7
    6577.      5013.     11590.    69.75    53.40   123.15     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Nuclear                        7
   60233.     44880.    105113.   635.77   473.27  1109.03     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Nuclear                        7
   14485.     11391.     25876.   155.23   121.81   277.04     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
UPNY    Nuclear                         7
   12810.     11276.     24086.   134.29   118.29   252.57     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Nuclear                         7
    7460.      7111.     14571.    76.44    72.70   149.14     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Nuclear                         7
   20103.     14417.     34520.   203.09   145.64   348.74     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Nuclear                         7
   18044.     13926.     31971.   197.40   152.44   349.84     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Nuclear                         7
   67582.     52920.    120502.   691.30   541.78  1233.07     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Nuclear                         7
   31636.     24741.     56376.   329.07   257.13   586.20     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Nuclear                         7
   25980.     20072.     46052.   283.85   219.39   503.25     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Nuclear                         7
   23812.     17693.     41505.   264.13   196.39   460.52     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Nuclear                         7
    5668.      4084.      9752.    55.33    39.87    95.20     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Nuclear                         7
   20010.     15089.     35099.   204.17   153.43   357.60     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Nuclear                         7
    5713.      3138.      8851.    57.49    31.58    89.07     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Nuclear                         7
   16759.     13773.     30532.   176.42   144.93   321.35     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Nuclear                       7
  450043.    340677.    790720.  4742.36  3590.10  8332.46     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
              SO2         MER           CO2          Carbon
```

Year: 2010, Plant Type: Hydro 8 (Emissions By Region)

		Generation			Trillion			Emission			Emission			Emission			Emission		
		(GWh)			(Btu)			(1000 Tons)			(1000 Tons)			(Tons)			(Mil Tonnes)		
		WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total
MECS	Hydro	8																	
		618.	395.	1013.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ECAO	Hydro	8																	
		1806.	1169.	2974.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ERCT	Hydro	8																	
		431.	365.	796.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MACE	Hydro	8																	
		2346.	1770.	4115.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MACW	Hydro	8																	
		1512.	632.	2144.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MACS	Hydro	8																	
		43.	16.	59.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WUMS	Hydro	8																	
		1007.	676.	1683.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MANO	Hydro	8																	
		1079.	747.	1826.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MAPP	Hydro	8																	
		5412.	4577.	9989.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
UPNY	Hydro	8																	
		15534.	10355.	25889.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
DSNY	Hydro	8																	
		1237.	824.	2061.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NYC	Hydro	8																	
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LILC	Hydro	8																	
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NENG	Hydro	8																	
		3489.	1724.	5212.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FRCC	Hydro	8																	
		83.	38.	121.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
VACA	Hydro	8																	
		6437.	3139.	9575.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TVA	Hydro	8																	
		11469.	6255.	17724.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SOU	Hydro	8																	
		6138.	2706.	8844.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ENTG	Hydro	8																	

```
     646.       474.      1120.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Hydro                           8
     601.       418.      1020.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Hydro                           8
    4702.      3448.      8150.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Hydro                           8
   16750.     17655.     34405.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Hydro                           8
   63340.     47747.    111087.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Hydro                           8
    3484.      3538.      7022.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Hydro                           8
    3767.      3826.      7592.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Hydro                           8
    2460.      2498.      4958.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Hydro                          8
  154390.    114990.    269380.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Comb.Cycle Gas                 9         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Comb.Cycle Gas                  9
    2936.      2206.      5141.    22.02    16.56    38.58     0.220    0.171
 0.391       0.000       0.000         2.048         0.558
ECAO    Comb.Cycle Gas                  9
    4303.      3297.      7600.    32.37    24.80    57.17     0.373    0.286
 0.659       0.000       0.000         3.034         0.827
ERCT    Comb.Cycle Gas                  9
   67602.     53416.    121018.   507.44   401.82   909.25     5.164    4.281
 9.445       0.000       0.000        48.254        13.160
MACE    Comb.Cycle Gas                  9
    6376.      4942.     11318.    49.22    38.51    87.73     0.950    0.787
 1.737       0.000       0.000         4.656         1.270
MACW    Comb.Cycle Gas                  9
    5422.      1385.      6806.    40.66    10.38    51.05     0.407    0.104
 0.510       0.000       0.000         2.709         0.739
MACS    Comb.Cycle Gas                  9
      95.       163.       258.     0.81     1.39     2.20     0.032    0.055
 0.088       0.000       0.000         0.117         0.032
```

```
WUMS    Comb.Cycle Gas                  9
     619.       445.      1064.     5.26     3.78     9.04     0.316    0.227
 0.542       0.000       0.000         0.480         0.131
MANO    Comb.Cycle Gas                  9
    2243.      1719.      3962.    16.83    12.89    29.72     0.168    0.129
 0.297       0.000       0.000         1.577         0.430
MAPP    Comb.Cycle Gas                  9
     247.       592.       840.     1.89     4.60     6.50     0.031    0.087
 0.118       0.000       0.000         0.345         0.094
UPNY    Comb.Cycle Gas                  9
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Comb.Cycle Gas                  9
    8224.      6343.     14567.    61.76    47.76   109.52     0.639    0.526
 1.164       0.000       0.000         5.813         1.585
NYC     Comb.Cycle Gas                  9
    1647.      1277.      2924.    13.19    10.26    23.45     0.686    0.540
 1.226       0.000       0.000         1.244         0.339
LILC    Comb.Cycle Gas                  9
    2175.      1614.      3789.    15.78    11.81    27.59     0.242    0.203
 0.445       0.000       0.000         1.464         0.399
NENG    Comb.Cycle Gas                  9
   36098.     26598.     62696.   273.39   201.45   474.84     4.080    3.001
 7.081       0.000       0.000        25.200         6.873
FRCC    Comb.Cycle Gas                  9
   38524.     38092.     76617.   298.58   295.96   594.55     7.621    7.660
15.281       0.000       0.000        31.553         8.605
VACA    Comb.Cycle Gas                  9
    2412.      3624.      6035.    18.56    28.41    46.97     0.374    0.662
 1.035       0.000       0.000         2.493         0.680
TVA     Comb.Cycle Gas                  9
    1840.      1567.      3406.    13.80    11.75    25.55     0.138    0.118
 0.255       0.000       0.000         1.356         0.370
SOU     Comb.Cycle Gas                  9
   36895.     24016.     60911.   277.02   180.35   457.37     2.887    1.882
 4.769       0.000       0.000        24.273         6.620
ENTG    Comb.Cycle Gas                  9
    8091.     19942.     28033.    60.68   149.62   210.30     0.607    1.506
 2.112       0.000       0.000        11.161         3.044
SPPN    Comb.Cycle Gas                  9
     650.      1690.      2340.     4.88    12.67    17.55     0.049    0.127
 0.176       0.000       0.000         0.931         0.254
SPPS    Comb.Cycle Gas                  9
   23838.     25908.     49746.   179.74   196.19   375.93     2.305    2.825
 5.131       0.000       0.000        19.951         5.441
CALI    Comb.Cycle Gas                  9
   26495.     20381.     46875.   200.02   154.10   354.11     2.046    1.575
 3.621       0.000       0.000        18.793         5.125
PNW     Comb.Cycle Gas                  9
   20464.     15388.     35852.   154.31   116.18   270.48     2.728    2.070
 4.798       0.000       0.000        14.355         3.915
AZNM    Comb.Cycle Gas                  9
   36471.     27496.     63967.   274.74   207.74   482.48     3.299    2.676
 5.975       0.000       0.000        25.605         6.983
RMPA    Comb.Cycle Gas                  9
    3561.       436.      3998.    27.05     3.31    30.36     0.419    0.051
 0.471       0.000       0.000         1.611         0.439
NWPE    Comb.Cycle Gas                  9
     169.        41.       211.     1.27     0.31     1.58     0.013    0.003
 0.016       0.000       0.000         0.084         0.023

Total Comb.Cycle Gas                 9
  337399.    282575.    619974.  2551.25  2142.61  4693.86    35.793   31.553
67.345       0.000       0.000       249.105        67.938
-------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: IGCC                          10         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    IGCC                           10
    1135.       877.      2013.     8.26     6.38    14.64     0.413    0.319
 0.732       0.000       0.006         1.364         0.372
ERCT    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    IGCC                           10
    1083.       837.      1921.     7.88     6.09    13.97     0.394    0.305
 0.699       0.000       0.003         1.301         0.355
VACA    IGCC                           10
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    IGCC                           10
     433.       335.       768.     3.15     2.44     5.59     0.095    0.073
 0.168       0.000       0.001         0.520         0.142

Total IGCC                          10
    2652.      2050.      4702.    19.30    14.91    34.21     0.902    0.697
 1.598       0.000       0.010         3.185         0.869
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Turbine                       11         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Turbine                        11
       2.        70.        72.     0.02     0.75     0.77     0.001    0.033
 0.034       0.000       0.000         0.041         0.011
ECAO    Turbine                        11
    1152.       666.      1818.    12.59     7.28    19.87     0.511    0.295
 0.806       0.000       0.000         1.055         0.288
ERCT    Turbine                        11
     744.      1129.      1873.     8.77    13.23    22.00     0.404    0.618
 1.022       0.000       0.000         1.167         0.318
```

```
MACE    Turbine                         11
       1.       415.       416.     0.01     4.56     4.57     0.000    0.201
 0.201       0.000       0.000         0.242         0.066
MACW    Turbine                         11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Turbine                         11
     391.       928.      1319.     4.55    11.74    16.29     0.238    0.647
 0.884       0.000       0.000         0.865         0.236
WUMS    Turbine                         11
    1499.       910.      2409.    13.61     8.86    22.47     0.644    0.401
 1.045       0.000       0.000         1.193         0.325
MANO    Turbine                         11
       1.      1010.      1011.     0.01    11.02    11.02     0.000    0.454
 0.455       0.000       0.000         0.585         0.160
MAPP    Turbine                         11
      15.       492.       506.     0.13     5.34     5.47     0.007    0.228
 0.236       0.000       0.000         0.290         0.079
UPNY    Turbine                         11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Turbine                         11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Turbine                         11
     106.        93.       199.     1.16     1.05     2.21     0.046    0.046
 0.093       0.000       0.000         0.117         0.032
LILC    Turbine                         11
     581.      1008.      1589.     6.58    11.40    17.97     0.297    0.505
 0.802       0.000       0.000         0.954         0.260
NENG    Turbine                         11
      10.        15.        25.     0.10     0.15     0.25     0.006    0.008
 0.013       0.000       0.000         0.013         0.004
FRCC    Turbine                         11
    1097.      3438.      4535.    12.02    37.82    49.85     0.495    1.584
 2.079       0.000       0.000         2.645         0.721
VACA    Turbine                         11
     317.      1485.      1802.     3.45    16.30    19.75     0.139    0.669
 0.807       0.000       0.000         1.048         0.286
TVA     Turbine                         11
       0.       265.       265.     0.00     2.90     2.90     0.000    0.116
 0.116       0.000       0.000         0.154         0.042
SOU     Turbine                         11
       0.      2117.      2117.     0.00    23.10    23.10     0.000    0.924
 0.924       0.000       0.000         1.226         0.334
ENTG    Turbine                         11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Turbine                         11
       0.      1114.      1114.     0.00    12.53    12.53     0.000    0.614
 0.614       0.000       0.000         0.665         0.181
SPPS    Turbine                         11
       0.       399.       399.     0.00     4.91     4.91     0.000    0.230
 0.230       0.000       0.000         0.261         0.071
CALI    Turbine                         11
     167.       505.       672.     1.53     5.31     6.84     0.078    0.225
 0.303       0.000       0.000         0.363         0.099
PNW     Turbine                         11
    6909.      5271.     12180.    74.42    56.77   131.19     3.361    2.564
 5.925       0.000       0.000         6.962         1.899
AZNM    Turbine                         11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Turbine                         11
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
NWPE    Turbine                        11
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Turbine                         11
   12992.     21331.     34323.   138.96   235.01   373.97     6.228   10.362
16.590       0.000       0.000        19.846         5.413
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Biomass                        12         (Emissions By R
egion)       Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Biomass                        12
     698.       539.      1237.     6.44     4.97    11.41     0.064    0.050
 0.114       0.456       0.003         0.000         0.000
ECAO    Biomass                        12
     364.       281.       645.     3.36     2.59     5.95     0.034    0.026
 0.060       0.238       0.002         0.000         0.000
ERCT    Biomass                        12
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Biomass                        12
     159.       116.       275.     1.30     0.95     2.25     0.013    0.010
 0.022       0.090       0.001         0.000         0.000
MACW    Biomass                        12
      74.        57.       131.     0.68     0.53     1.20     0.007    0.005
 0.012       0.048       0.000         0.000         0.000
MACS    Biomass                        12
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Biomass                        12
      52.        40.        92.     0.42     0.32     0.74     0.004    0.003
 0.007       0.030       0.000         0.000         0.000
MANO    Biomass                        12
       4.          3.          8.     0.03     0.03     0.06     0.000    0.000
 0.001       0.002       0.000         0.000         0.000
MAPP    Biomass                        12
     706.       546.      1252.     5.72     4.42    10.14     0.057    0.044
 0.101       0.405       0.003         0.000         0.000
UPNY    Biomass                        12
      78.        60.       138.     0.72     0.56     1.28     0.007    0.006
 0.013       0.051       0.000         0.000         0.000
DSNY    Biomass                        12
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Biomass                        12
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Biomass                        12
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Biomass                       12
     950.       170.      1121.     8.69     1.55    10.24     0.087    0.015
 0.102       0.409       0.003         0.000         0.000
FRCC    Biomass                       12
     234.       181.       415.     2.16     1.67     3.83     0.022    0.017
 0.038       0.153       0.001         0.000         0.000
VACA    Biomass                       12
     204.       157.       361.     1.88     1.45     3.33     0.019    0.015
 0.033       0.133       0.001         0.000         0.000
TVA     Biomass                       12
       4.         3.         8.     0.04     0.03     0.07     0.000    0.000
 0.001       0.003       0.000         0.000         0.000
SOU     Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Biomass                       12
      43.        33.        77.     0.40     0.31     0.71     0.004    0.003
 0.007       0.028       0.000         0.000         0.000
SPPN    Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Biomass                       12
    1872.      1447.      3319.    17.09    13.21    30.30     0.171    0.132
 0.303       1.212       0.009         0.000         0.000
PNW     Biomass                       12
      26.        20.        46.     0.21     0.16     0.37     0.002    0.002
 0.004       0.015       0.000         0.000         0.000
AZNM    Biomass                       12
     189.       140.       329.     1.53     1.14     2.67     0.015    0.011
 0.027       0.107       0.001         0.000         0.000
RMPA    Biomass                       12
       4.         3.         8.     0.03     0.03     0.06     0.000    0.000
 0.001       0.002       0.000         0.000         0.000
NWPE    Biomass                       12
      22.        17.        38.     0.17     0.13     0.31     0.002    0.001
 0.003       0.012       0.000         0.000         0.000

Total Biomass                       12
    5683.      3816.      9499.    50.87    34.05    84.92     0.509    0.340
 0.849       3.397       0.024         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Geothermal                   13         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
               (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

```
MECS    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Geothermal                    13
   11344.      8966.     20310.   291.69   230.53   522.21     0.000    0.000
```

```
 0.000       0.000       0.775         0.000         0.000
PNW     Geothermal                    13
      34.        27.        61.     1.10     0.87     1.97     0.000    0.000
 0.000       0.000       0.004         0.000         0.000
AZNM    Geothermal                    13
     756.       554.      1310.    24.49    17.94    42.43     0.000    0.000
 0.000       0.000       0.078         0.000         0.000
RMPA    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Geothermal                    13
    1026.       811.      1837.    32.60    25.77    58.37     0.000    0.000
 0.000       0.000       0.106         0.000         0.000

Total Geothermal                    13
   13161.     10358.     23518.   349.88   275.11   624.98     0.000    0.000
 0.000       0.000       0.963         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Landfill Gas                 14         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Landfill Gas                  14
      22.        17.        39.     0.31     0.23     0.54     0.038    0.029
 0.066       0.000       0.000         0.000         0.000
ECAO    Landfill Gas                  14
      54.        41.        95.     0.73     0.56     1.29     0.090    0.069
 0.159       0.000       0.000         0.000         0.000
ERCT    Landfill Gas                  14
     432.       324.       755.     5.41     4.07     9.48     0.665    0.501
 1.166       0.000       0.000         0.000         0.000
MACE    Landfill Gas                  14
     354.       260.       614.     3.81     2.81     6.62     0.469    0.345
 0.814       0.000       0.000         0.000         0.000
MACW    Landfill Gas                  14
       4.         3.         8.     0.06     0.05     0.11     0.008    0.006
 0.013       0.000       0.000         0.000         0.000
MACS    Landfill Gas                  14
      18.        14.        32.     0.24     0.19     0.43     0.030    0.023
 0.053       0.000       0.000         0.000         0.000
WUMS    Landfill Gas                  14
     161.       119.       280.     1.84     1.36     3.20     0.226    0.168
 0.394       0.000       0.000         0.000         0.000
MANO    Landfill Gas                  14
     170.       130.       300.     2.32     1.77     4.09     0.285    0.218
 0.503       0.000       0.000         0.000         0.000
MAPP    Landfill Gas                  14
      49.        38.        87.     0.67     0.51     1.18     0.083    0.063
 0.146       0.000       0.000         0.000         0.000
UPNY    Landfill Gas                  14
```

```
      27.        20.        47.      0.37     0.28     0.65     0.045    0.034
 0.079       0.000       0.000         0.000         0.000
DSNY    Landfill Gas                  14
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Landfill Gas                  14
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Landfill Gas                  14
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Landfill Gas                  14
     303.       222.       526.      3.33     2.45     5.77     0.409    0.301
 0.710       0.000       0.000         0.000         0.000
FRCC    Landfill Gas                  14
       9.         7.        16.      0.12     0.09     0.22     0.015    0.011
 0.026       0.000       0.000         0.000         0.000
VACA    Landfill Gas                  14
     112.        85.       197.      1.53     1.16     2.69     0.188    0.143
 0.331       0.000       0.000         0.000         0.000
TVA     Landfill Gas                  14
       9.         7.        16.      0.12     0.09     0.22     0.015    0.011
 0.026       0.000       0.000         0.000         0.000
SOU     Landfill Gas                  14
      40.        31.        71.      0.55     0.42     0.97     0.068    0.052
 0.119       0.000       0.000         0.000         0.000
ENTG    Landfill Gas                  14
      27.        20.        47.      0.37     0.28     0.65     0.045    0.034
 0.079       0.000       0.000         0.000         0.000
SPPN    Landfill Gas                  14
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Landfill Gas                  14
      40.        31.        71.      0.55     0.42     0.97     0.068    0.052
 0.119       0.000       0.000         0.000         0.000
CALI    Landfill Gas                  14
     966.       737.      1703.     12.24     9.34    21.58     1.506    1.148
 2.654       0.000       0.000         0.000         0.000
PNW     Landfill Gas                  14
      94.        72.       166.      1.28     0.98     2.26     0.158    0.120
 0.278       0.000       0.000         0.000         0.000
AZNM    Landfill Gas                  14
      74.        56.       130.      0.92     0.69     1.62     0.113    0.085
 0.199       0.000       0.000         0.000         0.000
RMPA    Landfill Gas                  14
       4.         3.         8.      0.06     0.05     0.11     0.008    0.006
 0.013       0.000       0.000         0.000         0.000
NWPE    Landfill Gas                  14
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Landfill Gas                  14
    2970.      2236.      5206.     36.83    27.79    64.63     4.531    3.419
 7.949       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Wind                          15         (Emissions By R
```

```
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Wind                          15
       2.         1.         2.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Wind                          15
     164.        92.       256.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Wind                          15
    1852.      1022.      2874.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Wind                          15
     129.        67.       196.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Wind                          15
      17.        10.        27.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Wind                          15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Wind                          15
      20.        11.        32.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Wind                          15
      88.        49.       137.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Wind                          15
    1485.       830.      2315.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Wind                          15
      87.        49.       136.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Wind                          15
      29.        16.        45.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Wind                          15
      27.        15.        41.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Wind                          15
      16.         9.        25.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Wind                          15
     319.       164.       483.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Wind                          15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Wind                          15
      20.        11.        31.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Wind                          15
       2.         1.         3.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Wind                          15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Wind                          15
      57.        32.        88.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
SPPN    Wind                           15
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Wind                           15
      66.         37.        102.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Wind                           15
    4635.       2599.       7234.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Wind                           15
     185.        104.        290.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Wind                           15
     393.        207.        600.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Wind                           15
     648.        363.       1011.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Wind                           15
      62.         35.         97.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Wind                          15
   10302.       5724.      16026.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Fuel Cell                    16         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Fuel Cell                      16
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Fuel Cell                      16
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Fuel Cell                      16
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Fuel Cell                      16
      10.          8.         18.     0.08     0.06     0.13     0.015    0.011
 0.027       0.000       0.000         0.007         0.002
MACW    Fuel Cell                      16
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Fuel Cell                      16
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Fuel Cell                      16
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Fuel Cell                    16
       5.         3.         8.     0.03     0.03     0.06     0.007    0.005
 0.012       0.000       0.000         0.003         0.001
DSNY    Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Fuel Cell                    16
       1.         1.         1.     0.01     0.00     0.01     0.001    0.001
 0.002       0.000       0.000         0.000         0.000
FRCC    Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Fuel Cell                    16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Fuel Cell                     16
      15.        12.        27.     0.12     0.09     0.20     0.023    0.017
 0.040       0.000       0.000         0.011         0.003
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
```


NOx
SO2 MER CO2 Carbon
Year: 2010, Plant Type: Solar 17 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
TVA     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Solar                          17
     516.       274.       790.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Solar                          17
      21.        15.        36.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Solar                          17
       5.         3.         7.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Solar                          17
      38.        20.        59.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Solar                          17
     580.       312.       892.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Non Fossil_Other              18         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Non Fossil_Other               18
     145.       115.       260.     1.60     1.26     2.86     0.000    0.000
 0.000       0.000       0.046         0.000         0.000
ECAO    Non Fossil_Other               18
     397.       313.       710.     4.36     3.44     7.81     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Non Fossil_Other               18
      44.        35.        79.     0.48     0.38     0.87     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Non Fossil_Other               18
```

1133. 893. 2026. 12.46 9.83 22.29 0.000 0.000
0.000 0.000 0.791 0.000 0.000
MACW Non Fossil_Other 18
525. 414. 938. 5.77 4.55 10.32 0.000 0.000
0.000 0.000 0.336 0.000 0.000
MACS Non Fossil_Other 18
242. 191. 434. 2.67 2.10 4.77 0.000 0.000
0.000 0.000 0.169 0.000 0.000
WUMS Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Non Fossil_Other 18
93. 73. 166. 1.02 0.80 1.82 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Non Fossil_Other 18
150. 118. 268. 1.65 1.30 2.95 0.000 0.000
0.000 0.000 0.105 0.000 0.000
UPNY Non Fossil_Other 18
150. 118. 268. 1.65 1.30 2.95 0.000 0.000
0.000 0.000 0.105 0.000 0.000
DSNY Non Fossil_Other 18
361. 285. 646. 3.98 3.14 7.11 0.000 0.000
0.000 0.000 0.252 0.000 0.000
NYC Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Non Fossil_Other 18
604. 476. 1080. 6.64 5.24 11.88 0.000 0.000
0.000 0.000 0.355 0.000 0.000
NENG Non Fossil_Other 18
2367. 1867. 4234. 26.04 20.53 46.57 0.000 0.000
0.000 0.000 1.647 0.000 0.000
FRCC Non Fossil_Other 18
1869. 1474. 3343. 20.56 16.21 36.77 0.000 0.000
0.000 0.000 1.120 0.000 0.000
VACA Non Fossil_Other 18
617. 487. 1104. 6.79 5.35 12.14 0.000 0.000
0.000 0.000 0.431 0.000 0.000
TVA Non Fossil_Other 18
53. 42. 95. 0.58 0.46 1.04 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Non Fossil_Other 18
137. 108. 244. 1.50 1.19 2.69 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Non Fossil_Other 18
101. 80. 181. 0.48 0.38 0.87 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Non Fossil_Other 18
785. 619. 1403. 9.00 7.10 16.10 0.000 0.000
0.000 0.000 0.225 0.000 0.000
PNW Non Fossil_Other 18
256. 202. 457. 2.81 2.22 5.03 0.000 0.000
0.000 0.000 0.102 0.000 0.000
AZNM Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
NWPE    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Non Fossil_Other              18
   10028.      7909.     17936.   110.04    86.79   196.83     0.000    0.000
 0.000       0.000       5.684         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Fossil_Other                  19         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Fossil_Other                  19
     268.       205.       473.     2.95     2.25     5.20     0.614    0.468
 1.082       0.000       0.000         0.000         0.000
ERCT    Fossil_Other                  19
       9.         7.        16.     0.10     0.08     0.17     0.020    0.016
 0.036       0.000       0.000         0.000         0.000
MACE    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Fossil_Other                  19
       9.         7.        16.     0.10     0.08     0.17     0.020    0.016
 0.036       0.000       0.000         0.000         0.000
MAPP    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
NENG    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Fossil_Other                   19
      89.        68.       158.     0.98     0.75     1.73     0.064    0.049
 0.114       0.000       0.000         0.000         0.000
PNW     Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Fossil_Other                   19
     183.       140.       323.     2.02     1.54     3.56     0.706    0.538
 1.244       0.012       0.018         0.000         0.000

Total Fossil_Other                  19
     559.       426.       985.     6.15     4.69    10.84     1.425    1.087
 2.512       0.012       0.018         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Pump Storage                 20         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Pump Storage                   20
```

```
     387.       839.      1226.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Pump Storage                  20
      51.       110.       160.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Pump Storage                  20
     264.       199.       463.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Pump Storage                  20
     125.       473.       598.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Pump Storage                  20
      72.       142.       214.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Pump Storage                  20
       0.       155.       155.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Pump Storage                  20
     163.       292.       455.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Pump Storage                  20
    1953.      1410.      3363.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Pump Storage                  20
     316.       588.       904.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Pump Storage                  20
       0.       635.       635.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Pump Storage                  20
      32.        37.        69.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Pump Storage                  20
       0.        43.        43.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Pump Storage                  20
       0.       386.       386.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
PNW     Pump Storage                    20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Pump Storage                    20
      22.        46.        67.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Pump Storage                    20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Pump Storage                    20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Pump Storage                    20
    3386.      5354.      8740.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Int. Imports                  21         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Int. Imports                    21
     122.        88.       210.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Int. Imports                    21
       1.         1.         2.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Int. Imports                    21
    4228.      3051.      7280.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
DSNY    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Int. Imports                  21
    5424.      3914.      9338.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Int. Imports                  21
    6533.      4715.     11248.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Int. Imports                 21
   16308.     11769.     28078.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Cgn_Coal                     22         (Emissions By R
egion)       Generation                    Trillion                  Emission
```

```
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Cgn_Coal                      22
     223.       151.       373.     2.31     1.56     3.88     0.468    0.316
 0.784       1.940       0.007         0.361         0.099
ECAO    Cgn_Coal                      22
     678.       466.      1144.     6.18     4.18    10.37     1.382    0.954
 2.335       4.739       0.019         0.965         0.263
ERCT    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Cgn_Coal                      22
     789.       538.      1327.     6.62     4.51    11.13     1.608    1.095
 2.703       6.119       0.029         1.036         0.283
MACW    Cgn_Coal                      22
    2253.      1635.      3888.    20.88    14.98    35.86     3.988    2.845
 6.833      14.798       0.092         3.339         0.911
MACS    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Cgn_Coal                      22
      61.        49.       110.     0.51     0.41     0.92     0.094    0.076
 0.171       0.459       0.003         0.089         0.024
MANO    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Cgn_Coal                      22
     312.       252.       563.     2.79     2.25     5.03     0.706    0.570
 1.276       1.283       0.009         0.469         0.128
UPNY    Cgn_Coal                      22
     704.       568.      1273.     5.84     4.71    10.55     0.922    0.744
 1.666       3.166       0.017         0.983         0.268
DSNY    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Cgn_Coal                      22
     824.       665.      1488.     7.62     6.15    13.77     1.072    0.865
 1.938       3.742       0.033         1.283         0.350
FRCC    Cgn_Coal                      22
    2643.      2133.      4777.    26.06    21.03    47.10     5.955    4.806
10.762      23.548       0.080         4.386         1.196
VACA    Cgn_Coal                      22
    4557.      3677.      8234.    40.37    32.58    72.95     7.520    6.069
13.590      36.515       0.143         6.794         1.853
TVA     Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Cgn_Coal                      22
       4.         3.         7.     0.04     0.03     0.07     0.007    0.006
 0.013       0.036       0.000         0.006         0.002
ENTG    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
SPPN    Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Cgn_Coal                        22
    1243.      1003.      2246.    10.63     8.57    19.20     2.067    1.668
 3.734       9.600       0.033         1.788         0.488
CALI    Cgn_Coal                        22
    1356.      1094.      2450.    12.37     9.98    22.36     0.557    0.449
 1.006      10.319       0.041         2.082         0.568
PNW     Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Cgn_Coal                        22
     223.       180.       402.     1.81     1.46     3.28     0.325    0.263
 0.588       1.638       0.007         0.316         0.086

Total Cgn_Coal                      22
   15868.     12414.     28282.   144.03   112.43   256.46    26.672   20.725
47.397     117.902       0.513        23.896         6.517
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Cgn_Gas                        23         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
               (GWh)                            (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Cgn_Gas                         23
    1987.      1691.      3679.    14.16    12.52    26.67     1.037    0.945
 1.982       0.000       0.000         1.415         0.386
ECAO    Cgn_Gas                         23
     376.       288.       664.     2.90     2.22     5.11     0.037    0.028
 0.065       0.000       0.000         0.271         0.074
ERCT    Cgn_Gas                         23
    9201.     11573.     20774.    71.14    90.11   161.25     1.629    2.327
 3.956       0.000       0.000         8.558         2.334
MACE    Cgn_Gas                         23
    4243.      2821.      7064.    30.90    21.14    52.04     1.165    0.857
 2.022       0.000       0.000         2.762         0.753
MACW    Cgn_Gas                         23
       0.        55.        55.     0.00     0.51     0.51     0.000    0.046
 0.046       0.000       0.000         0.027         0.007
MACS    Cgn_Gas                         23
     186.       143.       329.     1.83     1.40     3.23     0.073    0.056
 0.129       0.000       0.000         0.172         0.047
WUMS    Cgn_Gas                         23
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
MANO    Cgn_Gas                       23
      32.         26.         58.     0.24     0.20     0.44     0.002    0.003
 0.005       0.000       0.000         0.023         0.006
MAPP    Cgn_Gas                       23
       0.          5.          5.     0.00     0.06     0.06     0.000    0.002
 0.002       0.000       0.000         0.003         0.001
UPNY    Cgn_Gas                       23
    4902.         37.       4939.    39.47     0.30    39.76     3.611    0.027
 3.638       0.000       0.000         2.110         0.576
DSNY    Cgn_Gas                       23
     256.        269.        525.     2.42     2.53     4.95     0.226    0.237
 0.463       0.000       0.000         0.263         0.072
NYC     Cgn_Gas                       23
     209.        162.        372.     1.90     1.47     3.37     0.176    0.136
 0.313       0.000       0.000         0.179         0.049
LILC    Cgn_Gas                       23
     512.        354.        866.     4.52     3.18     7.70     0.406    0.285
 0.691       0.000       0.000         0.409         0.111
NENG    Cgn_Gas                       23
     526.        408.        934.     4.29     3.34     7.64     0.250    0.195
 0.445       0.000       0.000         0.405         0.111
FRCC    Cgn_Gas                       23
     210.       1506.       1715.     1.87    13.56    15.43     0.131    0.935
 1.066       0.000       0.000         0.819         0.223
VACA    Cgn_Gas                       23
    1339.       2190.       3529.    10.06    16.77    26.83     0.346    0.415
 0.761       0.000       0.000         1.424         0.388
TVA     Cgn_Gas                       23
     901.        664.       1565.     6.75     4.98    11.74     0.068    0.050
 0.117       0.000       0.000         0.623         0.170
SOU     Cgn_Gas                       23
    1912.       3140.       5052.    14.51    24.05    38.56     0.207    0.390
 0.597       0.000       0.000         2.046         0.558
ENTG    Cgn_Gas                       23
    6444.       2461.       8906.    48.33    18.33    66.66     0.483    0.215
 0.698       0.000       0.000         3.538         0.965
SPPN    Cgn_Gas                       23
       0.          8.          8.     0.00     0.08     0.08     0.000    0.003
 0.003       0.000       0.000         0.005         0.001
SPPS    Cgn_Gas                       23
    4080.       3337.       7417.    30.71    25.57    56.29     0.329    0.378
 0.706       0.000       0.000         2.987         0.815
CALI    Cgn_Gas                       23
   24815.      16346.      41161.   212.94   136.25   349.19     4.480    2.190
 6.670       0.000       0.000        18.532         5.054
PNW     Cgn_Gas                       23
    5024.       3854.       8878.    39.24    30.10    69.33     1.126    0.864
 1.989       0.000       0.000         3.680         1.004
AZNM    Cgn_Gas                       23
     331.       2204.       2534.     2.61    17.28    19.89     0.081    0.496
 0.577       0.000       0.000         1.055         0.288
RMPA    Cgn_Gas                       23
      24.          0.         24.     0.20     0.00     0.20     0.011    0.000
 0.011       0.000       0.000         0.011         0.003
NWPE    Cgn_Gas                       23
      45.         26.         71.     0.29     0.17     0.45     0.021    0.012
 0.033       0.000       0.000         0.024         0.007

Total Cgn_Gas                       23
   67555.      53570.     121125.   541.28   426.12   967.40    15.896   11.092
26.989       0.000       0.000        51.340        14.002
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Cgn_Oil                        24         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Cgn_Oil                        24
       0.        29.        29.     0.00     0.25     0.25     0.000    0.037
 0.037       0.000       0.000         0.013         0.004
VACA    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
TVA     Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Cgn_Oil                         24
    1741.      1405.      3145.    13.16    10.62    23.79     0.099    0.080
 0.178       0.000       0.000         1.262         0.344
PNW     Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Cgn_Oil                       24
    1741.      1434.      3175.    13.16    10.88    24.04     0.099    0.116
 0.215       0.000       0.000         1.276         0.348
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Cgn_Other                     25         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Cgn_Other                       25
     316.       244.       561.     1.68     1.30     2.98     0.007    0.005
 0.012       0.050       0.062         0.000         0.000
ECAO    Cgn_Other                       25
      26.        20.        46.     0.22     0.17     0.39     0.002    0.002
 0.004       0.016       0.000         0.000         0.000
ERCT    Cgn_Other                       25
      41.        31.        71.     0.25     0.19     0.44     0.045    0.034
 0.079       0.000       0.004         0.000         0.000
MACE    Cgn_Other                       25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
MACW Cgn_Other 25
156. 121. 277. 0.83 0.64 1.48 0.004 0.003
0.007 0.027 0.007 0.000 0.000
MACS Cgn_Other 25
234. 181. 415. 0.98 0.76 1.74 0.000 0.000
0.000 0.000 0.062 0.000 0.000
WUMS Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Cgn_Other 25
9. 7. 15. 0.04 0.03 0.06 0.000 0.000
0.000 0.000 0.002 0.000 0.000
UPNY Cgn_Other 25
191. 147. 338. 2.55 1.97 4.52 0.000 0.000
0.000 0.000 0.160 0.000 0.000
DSNY Cgn_Other 25
30. 23. 54. 0.13 0.10 0.23 0.000 0.000
0.000 0.000 0.008 0.000 0.000
NYC Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Cgn_Other 25
429. 332. 761. 2.85 2.20 5.05 0.027 0.021
0.047 0.189 0.010 0.000 0.000
FRCC Cgn_Other 25
360. 278. 638. 2.99 2.31 5.30 0.023 0.017
0.040 0.160 0.001 0.000 0.000
VACA Cgn_Other 25
191. 147. 338. 1.44 1.11 2.55 0.013 0.010
0.022 0.089 0.012 0.000 0.000
TVA Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Cgn_Other 25
22. 17. 38. 0.19 0.14 0.33 0.002 0.001
0.003 0.013 0.000 0.000 0.000
ENTG Cgn_Other 25
795. 607. 1402. 4.81 3.67 8.49 0.942 0.719
1.661 0.021 0.083 0.000 0.000
SPPN Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Cgn_Other 25
156. 121. 277. 0.66 0.51 1.17 0.001 0.001
0.001 0.005 0.000 0.000 0.000
CALI Cgn_Other 25
576. 444. 1020. 4.10 3.16 7.26 0.078 0.060
0.139 0.210 0.016 0.000 0.000
PNW Cgn_Other 25
416. 321. 738. 3.55 2.75 6.30 0.036 0.027
0.063 0.252 0.002 0.000 0.000
AZNM Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Cgn_Other 25
30. 23. 54. 0.24 0.19 0.43 0.002 0.002
0.004 0.017 0.000 0.000 0.000
NWPE Cgn_Other 25

```
      43.        33.        77.     0.18     0.14     0.32     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Cgn_Other                     25
    4021.      3097.      7118.    27.70    21.35    49.05     1.181    0.902
 2.083       1.049       0.429         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: NonCG IPP_Coal                26         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
NENG    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: NonCG IPP_Gas                27         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
ECAO    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     NonCG IPP_Gas                  27
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: NonCG IPP_Other              28         (Emissions By R
egion)       Generation                   Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
DSNY    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NonCG IPP_Other               28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Blr_Coal                     29         (Emissions By R
egion)       Generation                  Trillion                  Emission
          Emission    Emission      Emission       Emission
```

```
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Blr_Coal                      29
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Blr_Gas                       30         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
               (GWh)                           (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MANO    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
MAPP    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
UPNY    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
DSNY    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
NYC     Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
LILC    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
NENG    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
FRCC    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
VACA    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
TVA     Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
SOU     Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
ENTG    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
SPPN    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
SPPS    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
CALI    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
PNW     Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
AZNM    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
RMPA    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
NWPE    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000

Total Blr_Gas                        30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Blr_Oil                        31         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Blr_Oil                        31
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Oil                         31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Blr_Other                     32         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

MACW Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000

Total Blr_Other                      32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: SteamOnly Cogen               33         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    SteamOnly Cogen               33
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Rep.Coal-CC                  34         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
ECAO    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Rep.Coal-CC                    34
     955.       732.      1687.     6.89     5.29    12.18     0.069    0.053
 0.122       0.000       0.000         0.646         0.176
FRCC    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
AZNM    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Rep.Coal-CC                    34
     955.       732.      1687.     6.89     5.29    12.18     0.069    0.053
 0.122       0.000       0.000         0.646         0.176
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Rep.O/G-CC                    35         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Rep.O/G-CC                    35
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Rep.O/G-CC                    35
    1441.      1105.      2547.    10.41     7.98    18.39     0.104    0.080
 0.184       0.000       0.000         0.976         0.266
NENG    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Rep.O/G-CC                    35
   18946.     14532.     33478.   136.79   104.92   241.71     1.368    1.049
 2.417       0.000       0.000        12.828         3.498
PNW     Rep.O/G-CC                    35
     421.       323.       744.     3.04     2.33     5.37     0.030    0.023
 0.054       0.000       0.000         0.285         0.078
AZNM    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Rep.O/G-CC                     35
   20808.     15961.     36769.   150.23   115.24   265.47     1.502    1.152
 2.655       0.000       0.000        14.089         3.842
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Rep.Coal-IGCC                 36         (Emissions By R
egion)       Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
```

		(GWh)			(Btu)			(1000 Tons)	
		(1000 Tons)	(Tons)		(Mil Tonnes)	(Mil Tonnes)			
	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER	
MECS	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
ECAO	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
ERCT	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
MACE	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
MACW	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
MACS	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
WUMS	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
MANO	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
MAPP	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
UPNY	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
DSNY	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
NYC	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
LILC	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
NENG	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
FRCC	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
VACA	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
TVA	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
SOU	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
ENTG	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	
	0.000	0.000	0.000	0.000	0.000				
SPPN	Rep.Coal-IGCC			36					
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	

```
 0.000       0.000       0.000         0.000         0.000
SPPS    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.Scrubber                 37         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.Scrubber                   37
    1536.      1220.      2756.    15.43    12.25    27.68     3.487    2.769
 6.256       1.661       0.032         2.578         0.703
ERCT    Ret.Scrubber                   37
    7973.      6332.     14305.    85.48    67.89   153.36    12.805   10.170
22.974      22.238       0.647        14.984         4.087
MACE    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.Scrubber                   37
```

```
    6732.      5347.     12080.    65.21    51.79   117.01    10.577    8.401
18.978      12.562       0.153       10.896         2.972
MAPP    Ret.Scrubber                 37
    5738.      4557.     10295.    65.39    51.93   117.32    23.823   18.921
42.744       6.805       0.330       11.463         3.126
UPNY    Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
DSNY    Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
NYC     Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
LILC    Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
NENG    Ret.Scrubber                 37
     417.       332.       749.     4.11     3.26     7.37     0.485    0.385
 0.870       0.162       0.006        0.686         0.187
FRCC    Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
VACA    Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
TVA     Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
SOU     Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
ENTG    Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
SPPN    Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
SPPS    Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
CALI    Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
PNW     Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
AZNM    Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
RMPA    Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
NWPE    Ret.Scrubber                 37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000

Total Ret.Scrubber                 37
   22396.     17788.     40184.   235.62   187.13   422.75    51.176   40.645
91.822      43.427       1.169       40.608        11.075
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ExistSCR & Scrub          38         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSCR & Scrub          38
   41836.     33227.     75063.   398.62   316.59   715.21    10.779    8.561
19.340      72.203       0.332        66.603        18.164
ERCT    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSCR & Scrub          38
   11129.      8839.     19967.   104.72    83.17   187.90     2.560    2.033
 4.593      19.469       0.230        17.498         4.772
MACS    Ret.ExistSCR & Scrub          38
    6562.      5212.     11773.    65.99    52.41   118.40     1.512    1.201
 2.712      12.495       0.062        11.026         3.007
WUMS    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSCR & Scrub          38
    2251.      1788.      4039.    23.53    18.69    42.22     0.859    0.682
 1.541       5.277       0.017         3.931         1.072
MAPP    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSCR & Scrub          38
    1759.      1397.      3157.    17.34    13.77    31.11     0.858    0.682
 1.540       1.369       0.029         2.897         0.790
FRCC    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSCR & Scrub          38
   10827.      8599.     19427.   100.51    79.83   180.34     2.797    2.222
 5.019      12.178       0.172        16.794         4.580
TVA     Ret.ExistSCR & Scrub          38
    5469.      4343.      9812.    51.67    41.04    92.70     1.033    0.820
```

```
 1.853      11.588       0.037         8.633         2.354
SOU     Ret.ExistSCR & Scrub          38
    2994.      2378.      5373.    29.21    23.20    52.41     0.584    0.464
 1.048       4.699       0.041         4.880         1.331
ENTG    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR & Scrub          38
   82827.     65783.    148610.   791.59   628.70  1420.28    20.982   16.664
37.646     139.279       0.919       132.261        36.071
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ExistSNCR & Scrub         39         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR & Scrub         39
    5613.      4458.     10070.    52.88    42.00    94.88     6.694    5.317
12.011      11.007       0.136         8.836         2.410
ERCT    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR & Scrub         39
```

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Ret.ExistSNCR & Scrub 39
5613. 4458. 10070. 52.88 42.00 94.88 6.694 5.317
12.011 11.007 0.136 8.836 2.410

NOx
SO2 MER CO2 Carbon
Year: 2010, Plant Type: Ret.SCR 40 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.SCR 40
5806. 4611. 10417. 54.26 43.10 97.36 1.448 1.150
2.598 48.679 0.128 9.066 2.473
ECAO Ret.SCR 40
32195. 22776. 54971. 305.01 215.27 520.28 9.472 6.756
16.228 280.880 0.941 48.655 13.270
ERCT Ret.SCR 40
6808. 6611. 13419. 69.13 67.08 136.22 1.735 1.684
3.419 59.839 0.259 13.142 3.584
MACE Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.SCR 40
3405. 2705. 6110. 35.11 27.89 63.00 0.878 0.697
1.575 25.956 0.198 6.078 1.658
MANO Ret.SCR 40
4346. 3263. 7608. 46.02 34.50 80.52 1.695 1.267
2.962 40.261 0.106 7.498 2.045
MAPP Ret.SCR 40
9923. 7196. 17119. 101.03 73.30 174.33 2.829 2.037
4.866 80.182 0.358 16.583 4.523
UPNY Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.SCR                        40
     574.       456.      1029.     5.98     4.75    10.72     0.182    0.145
 0.327       5.897       0.018         0.998         0.272
TVA     Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.SCR                        40
    4906.      3896.      8802.    47.20    37.49    84.68     1.434    1.139
 2.573      44.695       0.128         7.886         2.151
ENTG    Ret.SCR                        40
    1868.      1483.      3351.    18.84    14.96    33.81     0.537    0.426
 0.963       7.945       0.106         3.262         0.890
SPPN    Ret.SCR                        40
    2352.      1547.      3900.    23.99    15.73    39.71     0.778    0.512
 1.290      19.857       0.077         3.743         1.021
SPPS    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SCR                         40
   72182.     54543.    126725.   706.57   534.06  1240.63    20.988   15.814
36.802     614.190       2.317       116.912        31.885
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ExistScrub & SCR          41         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub & SCR          41
```

47960. 38091. 86050. 476.05 378.09 854.14 12.565 9.979
22.544 178.798 0.403 79.540 21.693
ERCT Ret.ExistScrub & SCR 41
9597. 8208. 17805. 98.59 84.28 182.87 2.465 2.107
4.572 30.473 0.394 17.797 4.854
MACE Ret.ExistScrub & SCR 41
2411. 1915. 4326. 24.06 19.11 43.18 0.602 0.478
1.079 3.277 0.040 4.021 1.097
MACW Ret.ExistScrub & SCR 41
7574. 6016. 13590. 70.28 55.81 126.09 1.757 1.395
3.152 5.655 0.116 11.742 3.202
MACS Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ExistScrub & SCR 41
2225. 1767. 3991. 22.63 17.97 40.59 0.694 0.551
1.245 10.868 0.014 3.780 1.031
MAPP Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ExistScrub & SCR 41
273. 221. 494. 2.65 2.14 4.78 0.066 0.053
0.120 0.263 0.004 0.445 0.121
FRCC Ret.ExistScrub & SCR 41
17082. 13567. 30649. 167.76 133.24 301.00 4.252 3.377
7.628 84.978 0.117 28.030 7.645
VACA Ret.ExistScrub & SCR 41
1121. 890. 2011. 11.07 8.79 19.86 0.315 0.251
0.566 1.400 0.005 1.850 0.504
TVA Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.ExistScrub & SCR 41
3619. 2874. 6493. 37.99 30.17 68.16 0.950 0.754
1.704 16.849 0.023 6.348 1.731
ENTG Ret.ExistScrub & SCR 41
2781. 2208. 4989. 27.95 22.19 50.14 0.699 0.555
1.254 5.616 0.055 4.837 1.319
SPPN Ret.ExistScrub & SCR 41
288. 229. 517. 2.80 2.23 5.03 0.070 0.056
0.126 0.744 0.006 0.485 0.132
SPPS Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
AZNM    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub & SCR          41
   94931.     75985.    170915.   941.83   754.03  1695.86    24.434   19.556
43.990     338.922       1.176       158.875        43.330
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.SNCR                     42         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ExistScrub & SNCR         43         (Emissions By R
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
```

		(1000 Tons)	(Tons)	(Mil Tonnes)	(Mil Tonnes)			
	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
ECAO	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
ERCT	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
MACE	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
MACW	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
MACS	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
WUMS	Ret.	Exist	Scrub & SNCR	43				
	213.	169.	383.	2.22	1.76	3.98	0.577	0.458
	1.035	1.135	0.006	0.371		0.101		
MANO	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
MAPP	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
UPNY	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
DSNY	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
NYC	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
LILC	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
NENG	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
FRCC	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
VACA	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
TVA	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
SOU	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
ENTG	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
SPPN	Ret.	Exist	Scrub & SNCR	43				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		

```
SPPS    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub & SNCR         43
     213.       169.       383.     2.22     1.76     3.98     0.577    0.458
 1.035       1.135       0.006         0.371         0.101
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.SCR+Scrb                 44         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SCR+Scrb                  44
   46545.     36967.     83511.   449.14   356.72   805.86    12.068    9.585
21.653      75.850       0.409        75.044        20.467
ERCT    Ret.SCR+Scrb                  44
    1291.      1025.      2316.    14.36    11.40    25.76     0.359    0.285
 0.644       3.735       0.098         2.517         0.686
MACE    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.SCR+Scrb                  44
    6907.      5486.     12393.    67.00    53.21   120.21     1.675    1.330
 3.005      11.295       0.135        11.195         3.053
MACS    Ret.SCR+Scrb                  44
    7505.      5960.     13465.    69.90    55.51   125.41     2.237    1.776
 4.013       5.518       0.066        11.679         3.185
WUMS    Ret.SCR+Scrb                  44
    1226.       973.      2199.    11.13     8.84    19.98     0.278    0.221
 0.499       0.559       0.023         1.927         0.526
MANO    Ret.SCR+Scrb                  44
   14342.     11391.     25733.   145.75   115.76   261.51     4.944    3.926
```

```
 8.870      25.430       0.096        24.353         6.642
MAPP    Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.SCR+Scrb                   44
    1674.      1330.      3003.    17.77    14.12    31.89     0.444    0.353
 0.797       1.403       0.029         2.970         0.810
DSNY    Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.SCR+Scrb                   44
    4642.      3687.      8329.    44.39    35.26    79.65     1.110    0.881
 1.991       3.224       0.065         7.417         2.023
FRCC    Ret.SCR+Scrb                   44
    5664.      4498.     10162.    54.04    42.92    96.96     1.378    1.094
 2.472      12.120       0.039         9.029         2.462
VACA    Ret.SCR+Scrb                   44
   17101.     13582.     30683.   162.37   128.95   291.32     4.070    3.233
 7.303       8.740       0.074        27.129         7.399
TVA     Ret.SCR+Scrb                   44
    2893.      2298.      5190.    30.21    23.99    54.20     0.755    0.600
 1.355       3.252       0.019         5.047         1.376
SOU     Ret.SCR+Scrb                   44
   13619.     10817.     24436.   136.57   108.47   245.03     3.514    2.791
 6.305      18.378       0.136        22.818         6.223
ENTG    Ret.SCR+Scrb                   44
    3311.      2630.      5941.    36.32    28.85    65.17     0.908    0.721
 1.629       4.888       0.106         6.069         1.655
SPPN    Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.SCR+Scrb                   44
    9062.      7198.     16260.    94.81    75.30   170.11     2.370    1.882
 4.253       5.103       0.043        15.841         4.320
CALI    Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SCR+Scrb                  44
  135782.    107841.    243622.  1333.76  1059.30  2393.07    36.111   28.680
64.791     179.494       1.337       223.034        60.827
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
```

NOx
SO2 MER CO2 Carbon
Year: 2010, Plant Type: Ret.SNCR+Scrub 45 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
SOU     Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.Gas Reburn                46         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
MACS Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2010, Plant Type: Ret.ExistScrub+GasR 47 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
FRCC    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.GasReburn+Scrub           48         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
ERCT Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.GasReburn+Scrub 48

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ACI                        49         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
NYC     Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ExistScrub&ACI            50         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)
```

		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
ECAO	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
ERCT	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
MACE	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
MACW	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
MACS	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
WUMS	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
MANO	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
MAPP	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
UPNY	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
DSNY	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
NYC	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
LILC	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
NENG	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
FRCC	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
VACA	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
TVA	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
SOU	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
ENTG	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
SPPN	Ret.ExistScrub&ACI	50							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000	0.000			
SPPS	Ret.ExistScrub&ACI	50							

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ExistSCR&ACI              51         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MAPP    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

```
                                                                                                                NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ExistSNCR&ACI             52         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR&ACI             52
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ACI & SCR                53         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

MACS Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Ret.ACI & SCR 53

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2010, Plant Type: Ret.ExistScrub&ACI&SCR 54 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ExistScrub&ACI&SCR 54

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ACI & SNCR                55         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

ERCT Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ExistScrub&ACI&SNCR       56         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistScrub&ACI&SNCR       56
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ACI & Srub                57         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)
```

		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
ECAO	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
ERCT	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
MACE	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
MACW	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
MACS	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
WUMS	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
MANO	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
MAPP	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
UPNY	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
DSNY	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
NYC	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
LILC	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
NENG	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
FRCC	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
VACA	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
TVA	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
SOU	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
ENTG	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
SPPN	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000			0.000		0.000		
SPPS	Ret.ACI & Srub				57				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000

```
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ExistSCR&ACI&Scrub        58         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSCR&ACI&Scrub        58
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

```
                                                                                                                NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ExistSNCR&ACI&Scrub       59         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ExistSNCR&ExistScrub&ACI  60         (Emissions By R
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSNCR&ExistScrub&ACI  60
```

```
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ExistSCR&ExistScrub&ACI   61         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSCR&ExistScrub&ACI   61
    2490.      1978.      4468.    23.65    18.78    42.43     0.544    0.432
 0.976       4.667       0.039         3.951         1.078
MACW    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR&ExistScrub&ACI   61
    2490.      1978.      4468.    23.65    18.78    42.43     0.544    0.432
 0.976       4.667       0.039         3.951         1.078
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.ExistNOx&ExistScrub&ACI   62         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistNOx&ExistScrub&ACI   62
```

```
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
RMPA    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.SCR & Scrub & ACI         63         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.SNCR & Scrub & ACI        64         (Emissions By R
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                            (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
```

```
 Total      Total       Total         Total         Total

MECS    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
CALI    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.O/G SCR                  65         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
```

```
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.O/G SNCR                 66         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.O/G SNCR                  66
    1056.      1662.      2718.    10.25    16.19    26.45     0.810    1.220
 2.030       0.000       0.000         1.404         0.383
MACE    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
ENTG    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.O/G SNCR                   66
    1056.      1662.      2718.    10.25    16.19    26.45     0.810    1.220
 2.030       0.000       0.000         1.404         0.383
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.Nuclear (age 30+10 yrs)   67         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret.Nuclear (age 40+20 yrs)   68         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
VACA    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Ret. Biomass Cofiring         69         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
MACE Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Ret. Biomass Cofiring 69

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: CT Early Retirement           70         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
LILC    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: CC Early Retirement           71         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
               (GWh)                            (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

MECS CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI CC Early Retirement 71

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: O/G Early Retirement          72         (Emissions By R
egion)       Generation                    Trillion                Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
UPNY    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
```

Year: 2010, Plant Type: Coal Early Retirement 73 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Coal Early Retirement 73

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2010, Plant Type: Nuke Early Retirement         74         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
WUMS    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
```


NOx
SO2 MER CO2 Carbon
Year: 2010, System Totals (By Region)Generation Trillion
Emission Emission Emission
Emission Emission
---------- (GWh)
(Btu) (1000 Tons) (1000 Tons)
(Tons) (Mil Tonnes)(Mil Tonnes)

WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER	
Region MECS								
57598.	44649.	102247.	545.94	420.06	966.00	49.264	36.234	
85.498	357.737	1.484	75.972		20.720			
Region ECAO								
317187.	239450.	556637.	3080.79	2322.80	5403.59	189.086	138.093	3
27.178	1364.884	4.889	462.294		126.080			
Region ERCT								
157970.	156129.	314099.	1399.33	1421.20	2820.53	72.499	93.810	1
66.309	280.946	2.713	171.222		46.697			
Region MACE								
71024.	52667.	123691.	679.78	505.86	1185.64	15.929	11.870	
27.800	83.759	1.357	33.052		9.014			
Region MACW								
65580.	45972.	111552.	613.32	434.03	1047.35	30.749	22.497	
53.246	151.180	1.275	69.803		19.037			
Region MACS								
27826.	21222.	49048.	278.73	213.77	492.50	12.374	9.634	
22.008	66.884	0.530	30.113		8.213			
Region WUMS								
36672.	27391.	64063.	367.30	275.93	643.23	40.705	30.354	
71.059	189.390	1.094	47.972		13.083			
Region MANO								
136171.	102346.	238516.	1386.58	1042.06	2428.64	85.002	62.468	1
47.470	391.025	1.991	122.255		33.342			
Region MAPP								
99690.	75221.	174911.	986.20	740.49	1726.70	157.544	117.201	2
74.745	442.708	3.516	137.423		37.479			
Region UPNY								
51413.	35770.	87183.	311.85	228.25	540.10	19.207	12.424	
31.630	95.914	0.799	24.305		6.629			
Region DSNY								
20661.	17460.	38120.	176.45	151.43	327.88	6.788	5.467	
12.255	28.935	0.355	11.377		3.103			
Region NYC								
7798.	8070.	15868.	71.66	75.01	146.68	4.705	4.985	
9.689	0.000	0.000	7.784		2.123			
Region LILC								
5447.	5651.	11098.	45.17	51.01	96.18	1.106	1.592	
2.698	0.000	0.355	4.474		1.220			
Region NENG								
81481.	58910.	140391.	628.67	460.32	1089.00	11.969	8.926	
20.895	30.065	1.888	42.814		11.677			
Region FRCC								
102780.	92616.	195397.	946.96	847.12	1794.09	37.825	33.774	
71.599	199.024	1.582	103.760		28.298			
Region VACA								

178454. 140830. 319284. 1677.18 1340.66 3017.84 70.807 55.152 1
25.958 525.910 2.262 160.526 43.780
Region TVA
108797. 82941. 191738. 971.31 760.84 1732.15 53.018 40.400
93.418 369.538 0.989 104.980 28.631
Region SOU
168631. 130926. 299557. 1526.56 1209.50 2736.05 97.209 79.277 1
76.486 825.829 2.315 187.016 51.004
Region ENTG
72754. 67344. 140098. 715.51 636.08 1351.60 37.483 30.593
68.076 178.762 1.553 72.086 19.660
Region SPPN
42911. 35139. 78050. 437.36 356.41 793.78 70.798 55.671 1
26.468 119.453 1.419 65.235 17.791
Region SPPS
73903. 69317. 143220. 627.65 591.96 1219.61 63.623 56.701 1
20.324 198.083 1.481 96.290 26.261
Region CALI
145560. 110078. 255638. 1255.35 911.34 2166.68 12.564 8.254
20.818 18.728 1.093 65.665 17.909
Region PNW
117188. 87355. 204543. 418.32 308.16 726.49 24.110 18.910
43.020 21.413 0.440 39.275 10.711
Region AZNM
98735. 79984. 178719. 892.53 716.80 1609.33 96.070 76.783 1
72.853 97.632 1.195 96.507 26.320
Region RMPA
33800. 25114. 58913. 296.72 217.33 514.05 56.172 44.322 1
00.494 78.218 0.457 47.267 12.891
Region NWPE
56011. 43503. 99514. 567.02 435.10 1002.12 112.136 86.258 1
98.395 105.504 1.104 88.327 24.089

System Total
2336042. 1856055. 4192097. 20904.27 16673.53 37577.81 1428.738 1141.650 25
70.389 6221.520 38.133 2367.795 645.762

(**) Industrial Boiler generation not included in generation totals

---

NOx
SO2 MER CO2 Carbon
Year: 2010, System Totals (Emissions By Plant Type)Generation Trillion
Emission Emission Emission
Emission Emission
---------- (GWh)
(Btu) (1000 Tons) (1000 Tons)
(Tons) (Mil Tonnes)(Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
110541. 87108. 197649. 1077.97 849.19 1927.16 38.223 29.539
67.762 214.694 1.285 179.604 48.983
Total Scrubbed Coal 2
190326. 153119. 343445. 1984.52 1599.45 3583.98 400.704 320.281 7
20.986 480.620 6.209 340.955 92.988
Total Unscrubbed Coal_NOx 3
108360. 82811. 191171. 1045.30 798.08 1843.38 56.382 42.046

98.428 1087.145 3.288 172.549 47.059
Total Unscrubbed Coal 4
353750. 265457. 619207. 3577.46 2682.58 6260.04 664.008 498.396 11
62.404 2984.580 12.607 591.532 161.327
Total Oil/Gas Steam 5
23740. 38787. 62527. 227.52 381.86 609.38 11.963 39.949
51.912 0.000 0.000 32.340 8.820
Total Oil/Gas Steam_Nox 6
420. 1820. 2240. 4.07 17.97 22.05 0.313 1.136
1.449 0.000 0.000 1.170 0.319
Total Nuclear 7
450043. 340677. 790720. 4742.36 3590.10 8332.46 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
154390. 114990. 269380. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
337399. 282575. 619974. 2551.25 2142.61 4693.86 35.793 31.553
67.345 0.000 0.000 249.105 67.938
Total IGCC 10
2652. 2050. 4702. 19.30 14.91 34.21 0.902 0.697
1.598 0.000 0.010 3.185 0.869
Total Turbine 11
12992. 21331. 34323. 138.96 235.01 373.97 6.228 10.362
16.590 0.000 0.000 19.846 5.413
Total Biomass 12
5683. 3816. 9499. 50.87 34.05 84.92 0.509 0.340
0.849 3.397 0.024 0.000 0.000
Total Geothermal 13
13161. 10358. 23518. 349.88 275.11 624.98 0.000 0.000
0.000 0.000 0.963 0.000 0.000
Total Landfill Gas 14
2970. 2236. 5206. 36.83 27.79 64.63 4.531 3.419
7.949 0.000 0.000 0.000 0.000
Total Wind 15
10302. 5724. 16026. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
15. 12. 27. 0.12 0.09 0.20 0.023 0.017
0.040 0.000 0.000 0.011 0.003
Total Solar 17
580. 312. 892. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
10028. 7909. 17936. 110.04 86.79 196.83 0.000 0.000
0.000 0.000 5.684 0.000 0.000
Total Fossil_Other 19
559. 426. 985. 6.15 4.69 10.84 1.425 1.087
2.512 0.012 0.018 0.000 0.000
Total Pump Storage 20
3386. 5354. 8740. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
16308. 11769. 28078. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
15868. 12414. 28282. 144.03 112.43 256.46 26.672 20.725
47.397 117.902 0.513 23.896 6.517
Total Cgn_Gas 23
67555. 53570. 121125. 541.28 426.12 967.40 15.896 11.092
26.989 0.000 0.000 51.340 14.002
Total Cgn_Oil 24
1741. 1434. 3175. 13.16 10.88 24.04 0.099 0.116
0.215 0.000 0.000 1.276 0.348
Total Cgn_Other 25

```
    4021.      3097.      7118.    27.70    21.35    49.05     1.181    0.902
 2.083       1.049       0.429         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
     955.       732.      1687.     6.89     5.29    12.18     0.069    0.053
 0.122       0.000       0.000         0.646         0.176
Total Rep.O/G-CC                     35
   20808.     15961.     36769.   150.23   115.24   265.47     1.502    1.152
 2.655       0.000       0.000        14.089         3.842
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
   22396.     17788.     40184.   235.62   187.13   422.75    51.176   40.645
91.822      43.427       1.169        40.608        11.075
Total Ret.ExistSCR & Scrub           38
   82827.     65783.    148610.   791.59   628.70  1420.28    20.982   16.664
37.646     139.279       0.919       132.261        36.071
Total Ret.ExistSNCR & Scrub          39
    5613.      4458.     10070.    52.88    42.00    94.88     6.694    5.317
12.011      11.007       0.136         8.836         2.410
Total Ret.SCR                        40
   72182.     54543.    126725.   706.57   534.06  1240.63    20.988   15.814
36.802     614.190       2.317       116.912        31.885
Total Ret.ExistScrub & SCR           41
   94931.     75985.    170915.   941.83   754.03  1695.86    24.434   19.556
43.990     338.922       1.176       158.875        43.330
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
     213.       169.       383.     2.22     1.76     3.98     0.577    0.458
 1.035       1.135       0.006         0.371         0.101
Total Ret.SCR+Scrb                   44
  135782.    107841.    243622.  1333.76  1059.30  2393.07    36.111   28.680
64.791     179.494       1.337       223.034        60.827
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
    2490.      1978.      4468.    23.65    18.78    42.43     0.544    0.432
 0.976       4.667       0.039         3.951         1.078
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
    1056.      1662.      2718.    10.25    16.19    26.45     0.810    1.220
 2.030       0.000       0.000         1.404         0.383
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

System Total
 2336042.   1856055.   4192097. 20904.27 16673.53 37577.81  1428.738 1141.650 25
70.389    6221.520      38.133      2367.795       645.762
System Total Without Imports
 2319734.   1844286.   4164020. 20904.27 16673.53 37577.81  1428.738 1141.650 25
70.389    6221.520      38.133      2367.795       645.762
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler generation in BBtu, not included in generation totals



-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------
Year: 2015, Region: MECS     (Emissions By Plant)
--------------------------------------------------

            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  MECS  TCOLE0411391030308 01              BD1: 5.1 0.39  0.33  0.25    20.   0.
  43.30  3.85  3.85       83.        66.       149.     0.86     0.69     1.55
   0.168    0.134    0.302       0.258       0.000         0.144         0.039
Scrubbed Coal                  2
  MECS  TSXBS0432392020103 01              BD1: 5.1 0.30  0.07  1.72    65.   0.
  40.60  2.94  2.94      270.       214.       484.     2.97     2.36     5.33
   0.446    0.354    0.800       0.192       0.005         0.496         0.135
  MECS  TSXBS0432392020203 01              BD1: 5.1 0.33  0.12  2.94    50.   0.
  40.60  2.94  2.94      208.       165.       372.     2.43     1.93     4.36
   0.401    0.318    0.719       0.265       0.006         0.406         0.111
Unscrubbed Coal_NOx            3
  MECS  TSJBO0412392020202 01              BB2: 4.1 0.24  1.00  3.69    20.   0.
  32.30  1.54  1.54       83.        66.       149.     0.92     0.73     1.66
   0.111    0.088    0.199       0.829       0.003         0.154         0.042
```

```
  MECSMITSFSC0441392020101 01                SB1: 4.5 0.04  1.00  4.41  3000.   0.
  27.00  2.51  2.51    12450.      9888.     22339.   114.47    90.91   205.38
   2.060    1.636    3.697     102.692       0.453        19.815         5.404
Unscrubbed Coal                  4
  MECS  TCOLU0411392050710 01                BB2: 4.1 0.40  1.00  4.10    22.   0.
  31.80  1.54  1.54       91.        73.       164.     0.95     0.75     1.70
   0.189    0.150    0.339       0.850       0.003         0.158         0.043
  MECS  TCOLU0431152020110 01                BB2: 4.1 0.46  1.00  2.62    45.   0.
  32.00  1.54  1.54      156.        95.       252.     1.63     0.99     2.62
   0.374    0.228    0.602       1.309       0.003         0.244         0.067
  MECS  TCOLU0431392020110 01                BB2: 4.1 0.40  1.00  2.62   253.   0.
  32.00  1.54  1.54     1050.       834.      1884.    10.92     8.67    19.59
   2.184    1.735    3.919       9.796       0.026         1.825         0.498
  MECS  TSASU0441392020110 01                SB1: 4.5 0.26  0.67  4.41  1260.   0.
  22.40  1.54  1.54     5229.      4153.      9382.    51.48    40.88    92.36
   6.615    5.254   11.868      30.802       0.204         8.911         2.430
  MECS  TSBBU0441392020110 01                BB2: 4.1 0.36  1.00  2.62   500.   0.
  32.00  1.54  1.54     2075.      1648.      3723.    18.96    15.06    34.02
   3.385    2.688    6.073      17.011       0.045         3.168         0.864
  MECS  TSBSU0441392020110 01                SB1: 4.5 0.31  1.00  4.41  1894.   0.
  29.20  1.54  1.54     7860.      5318.     13179.    75.92    51.37   127.28
  11.881    8.039   19.919      63.640       0.281        12.280         3.349
  MECS  TSEBU0441392020110 01                BB2: 4.1 0.30  1.00  2.62   320.   0.
  32.00  1.54  1.54     1328.      1055.      2383.    13.06    10.38    23.44
   1.960    1.556    3.516      11.720       0.031         2.183         0.595
  MECSMITSGBU0431392020110 01                BB2: 4.1 0.41  1.00  2.62   190.   0.
  32.00  1.54  1.54      789.       626.      1415.     7.92     6.29    14.21
   1.640    1.302    2.942       7.106       0.019         1.323         0.361
  MECSMITSGBU0432391050210 01                BB1: 3.4 0.55  1.00  3.41    27.   0.
  26.40  1.54  1.54       72.        57.       129.     0.90     0.72     1.62
   0.246    0.195    0.441       0.808       0.003         0.150         0.041
  MECSMITSGBU0441392020110 01                BB2: 4.1 0.36  1.00  2.62   945.   0.
  32.00  1.54  1.54     3922.      3115.      7037.    37.66    29.91    67.57
   6.854    5.444   12.298      33.787       0.089         6.293         1.716
  MECS  TSIBU0432392020110 01                BB2: 4.1 0.30  1.00  2.62    53.   0.
  32.00  1.54  1.54      220.       175.       395.     2.41     1.92     4.33
   0.365    0.290    0.656       2.164       0.006         0.403         0.110
  MECS  TSIBU0441392020110 01                BB2: 4.1 0.43  1.00  2.62   103.   0.
  26.40  1.54  1.54      427.       340.       767.     4.39     3.49     7.88
   0.947    0.752    1.698       3.941       0.010         0.734         0.200
  MECS  TSIBU0442392020110 01                BB2: 4.1 0.30  1.00  2.62   236.   0.
  32.00  1.54  1.54      979.       652.      1631.    11.40     7.59    18.99
   1.711    1.138    2.849       9.495       0.025         1.768         0.482
  MECS  TSKBU0412391020710 01                BB2: 4.1 0.81  1.00  4.10    21.   0.
  32.00  1.54  1.54       87.        69.       156.     1.09     0.87     1.95
   0.443    0.352    0.795       0.977       0.004         0.182         0.050
  MECS  TSKBU0412391050710 01                BB2: 4.1 1.67  1.00  4.10    15.   0.
  26.40  1.54  1.54       62.        49.       112.     0.75     0.59     1.34
   0.625    0.497    1.122       0.670       0.003         0.125         0.034
  MECSMITSLBU0432152020110 01                BB2: 4.1 0.36  1.00  2.62   318.   0.
  29.30  1.54  1.54     1106.       674.      1779.    11.96     7.29    19.24
   2.146    1.308    3.454       9.622       0.025         1.792         0.489
  MECSMITSLBU0441152020110 01                BB2: 4.1 0.44  1.00  2.62   156.   0.
  26.40  1.54  1.54      647.       331.       978.     6.24     3.19     9.43
   1.379    0.704    2.084       4.714       0.012         0.878         0.239
Oil/Gas Steam                    5
  MECS  STHSU0421   000000 00                GAS      0.20  0.00  0.00  1035.   0.
  17.10  2.57  2.57     1053.       570.      1623.    10.10     5.46    15.56
   1.005    0.544    1.548       0.000       0.000         0.826         0.225
Oil/Gas Steam_Nox                6
Nuclear                          7
  MECS  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1110.   0.
 109.80  0.75  0.75     4676.      4072.      8748.    60.17    52.40   112.57
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
```

```
  MECS  HYDRO00     000000 00                HYDRO    0.00  0.00  0.00   158.   0.
  15.40  0.00  0.00      618.       395.      1013.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  MECS  CC   0413   000000 00                GAS      0.17  0.00  0.00    42.   0.
  19.40  1.03  1.03        9.        22.        31.     0.10     0.22     0.32
   0.008    0.019    0.027       0.000       0.000         0.017         0.005
  MECS  CC   0422   000000 00                GAS      0.02  0.00  0.00  1456.   0.
  13.90  1.03  1.03     3789.      2252.      6040.    28.41    16.89    45.30
   0.284    0.169    0.453       0.000       0.000         2.404         0.656
IGCC                           10
Turbine                        11
  MECS  CT   0411   000000 00                GAS      0.11  0.00  0.00     9.   0.
  11.20  1.03  1.03        6.         5.        11.     0.06     0.04     0.10
   0.003    0.002    0.005       0.000       0.000         0.005         0.001
  MECS  CT   0412   000000 00                GAS      0.10  0.00  0.00   152.   0.
   9.00  1.03  1.03       35.        26.        61.     0.37     0.28     0.65
   0.018    0.014    0.032       0.000       0.000         0.034         0.009
  MECS  CT   0422   000000 00                GAS      0.08  0.00  0.00  2392.   0.
   2.80  0.00  1.03        0.       360.       360.     0.00     3.93     3.93
   0.000    0.157    0.157       0.000       0.000         0.209         0.057
Biomass                        12
  MECS  BIOMS00  42 000000 00                B1-: 0.6 0.02  0.08  0.57   161.   0.
  44.80  5.36  5.36      698.       539.      1237.     6.44     4.97    11.41
   0.064    0.050    0.114       0.456       0.003         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  MECS  LFGAS00     000000 00                WASTE    0.25  0.00  0.00     5.   0.
  78.60 10.48 10.48       22.        17.        39.     0.31     0.23     0.54
   0.038    0.029    0.066       0.000       0.000         0.000         0.000
Wind                           15
  MECS  WIND 00     000000 00                NONE     0.00  0.00 71.00     1.   0.
  26.40  0.00  0.00        2.         1.         2.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  MECS  OTHER00     000000 00                NONE     0.00  0.00  0.00    18.   0.
 103.60  0.00  0.00       79.        63.       142.     0.87     0.69     1.56
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MECS  OTHER00     000000 00                NONE     0.00  0.00 71.00    15.   0.
 103.60  0.00  0.00       66.        52.       118.     0.73     0.57     1.30
   0.000    0.000    0.000       0.000       0.046         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
  MECS  PUMPS00     000000 00                NONE     0.00  0.00 71.00  1872.   0.
   6.50  0.00  0.00     1115.       839.      1954.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
  MECS  MIIMP00     000000 00                NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00        1.         1.         2.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                       22
  MECS  CGCOU0431392050710 01                BB1: 3.4 0.40  1.00  3.41    55.   0.
  11.70  1.54  1.54      223.       151.       373.     2.31     1.56     3.88
   0.468    0.316    0.784       1.940       0.007         0.361         0.099
Cgn_Gas                        23
  MECS  CGCC 0413   000000 00                GAS      0.18  0.00  0.00    57.   0.
  13.90  1.03  1.03       38.        29.        68.     0.36     0.27     0.63
   0.032    0.024    0.056       0.000       0.000         0.033         0.009
  MECS  CGCC 0421   000000 00                GAS      0.18  0.00  0.00   738.   0.
  13.90  1.03  1.03     2481.      1141.      3622.    17.14     7.89    25.03
   1.543    0.710    2.253       0.000       0.000         1.328         0.362
  MECS  CGCC 0422   000000 00                GAS      0.05  0.00  0.00   724.   0.
  13.90  1.03  1.03     1460.      1120.      2580.    11.27     8.64    19.91
```

```
   0.304    0.233    0.537       0.000       0.000         1.056         0.288
  MECS  CGCC 0423   000000 00              GAS      0.18  0.00  0.00   977.   0.
  13.90  1.03  1.03      219.       396.       614.     2.17     3.93     6.10
   0.195    0.353    0.549       0.000       0.000         0.324         0.088
Cgn_Oil                        24
Cgn_Other                      25
  MECS  CGBIO00  42 000000 00              B1-: 0.6 0.02  0.08  0.57    19.   0.
  44.80  5.36  5.36       82.        64.       146.     0.70     0.54     1.25
   0.007    0.005    0.012       0.050       0.000         0.000         0.000
  MECS  CGOTH00     000000 00              NONE     0.00  0.00 71.00    54.   0.
 103.60  0.00  0.00      234.       181.       415.     0.98     0.76     1.74
   0.000    0.000    0.000       0.000       0.062         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  MECS  TSABU0441391020110 01     SCR2     BB2: 4.1 0.06  1.00  2.62   790.   6.
  22.70  2.39  2.39     3279.      2604.      5883.    30.52    24.24    54.76
   0.855    0.679    1.533      27.381       0.072         5.100         1.391
  MECS  TSDBU0441392020110 01     SCR1     BB2: 4.1 0.05  1.00  2.62   609.   9.
  32.50  2.49  2.49     2527.      2007.      4535.    23.74    18.86    42.60
   0.594    0.471    1.065      21.298       0.056         3.967         1.082
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
```

Coal Early Retirement 73
Nuke Early Retirement 74

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation reported in BBtu

---

Year: 2015, Region: ECAO (Emissions By Plant)

NOx SO2 MER CO2 Carbon

Generation Trillion

Emission Emission Emission Emission Emission

(lb/MBtu)(lb/TBtu)(MW) $

/KWyr VOM Mill/KWh (GWh) (Btu)

(1000 Tons) (1000 Tons) (Tons) (Mil Tonnes)(Mil Tonnes)

Unit Fuel NOx SO2 MERCURY Cap. Cap

. FO&M WINT. SUMM. WINTER SUMMER Total WINTER SUMMER Total

WINTER SUMMER Total Total Total Total Total

Scrubbed Coal_NOx 1

ECAO TSXBD0241041020207 01 BG1: 8.0 0.40 0.40 4.66 171. 0.
43.10 3.85 3.85 710. 564. 1273. 7.44 5.91 13.35
1.492 1.185 2.677 2.637 0.031 1.243 0.339
ECAO TSYBA0441192020105 01 BG1: 8.0 0.05 0.25 0.80 500. 0.
41.20 3.91 3.91 2075. 1648. 3723. 21.59 17.14 38.73
0.518 0.411 0.930 4.841 0.016 3.607 0.984
ECAOOHTSYBA0441041020105 01 BG1: 8.0 0.06 0.25 0.80 2600. 0.
43.30 3.91 3.91 0. 2546. 2546. 0.00 24.31 24.31
0.000 0.705 0.705 3.038 0.010 2.263 0.617
ECAOOHTSYBA0441041020105 01 BG2:17.4 0.06 0.25 1.74 2600. 0.
43.30 3.91 3.91 10790. 6024. 16815. 103.03 57.52 160.55
2.988 1.668 4.656 20.068 0.140 14.950 4.077
ECAO TSXBA0641202020105 01 BG1: 8.0 0.04 0.25 0.80 1717. 0.
38.00 3.91 3.91 7126. 5659. 12785. 72.03 57.21 129.23
1.585 1.259 2.843 16.154 0.052 12.035 3.282
ECAO TSXBA0641202020205 01 BG1: 8.0 0.03 0.25 0.80 600. 0.
41.20 3.91 3.91 2490. 1978. 4468. 24.76 19.67 44.43
0.421 0.334 0.755 5.554 0.018 4.138 1.128
ECAO TSZBA0641051020105 01 BG1: 8.0 0.05 0.25 0.80 1920. 0.
43.30 3.91 3.91 7968. 6329. 14297. 75.44 59.92 135.36
1.886 1.498 3.384 16.920 0.054 12.605 3.438
ECAO TCOLA0641202020105 01 BG1: 8.0 0.01 0.25 0.80 268. 0.
23.60 3.91 3.91 1112. 883. 1996. 10.01 7.95 17.96
0.055 0.044 0.099 2.245 0.007 1.673 0.456
ECAO TSXBE0232041020207 01 BG1: 8.0 0.39 0.40 4.66 194. 0.
43.30 3.85 3.85 805. 536. 1341. 9.82 6.53 16.35
1.934 1.287 3.221 3.229 0.038 1.522 0.415
ECAO TSXBE0242041020207 01 BG1: 8.0 0.38 0.40 4.66 109. 0.
43.30 3.85 3.85 452. 301. 753. 4.91 3.27 8.18
0.941 0.626 1.567 1.657 0.019 0.762 0.208
ECAO TSVBA0641201010105 01 BG1: 8.0 0.07 0.25 0.80 141. 0.
43.50 3.91 3.91 585. 465. 1050. 5.86 4.66 10.52
0.217 0.172 0.389 1.315 0.004 0.979 0.267
ECAOINTSVBA0441181020105 01 BG1: 8.0 0.05 0.25 0.80 619. 0.
41.20 3.91 3.91 2569. 2040. 4609. 25.98 20.63 46.61
0.662 0.526 1.189 5.827 0.019 4.341 1.184
ECAOINTSVBA0441182020105 01 BG1: 8.0 0.04 0.25 0.80 865. 0.
41.80 3.91 3.91 3590. 2851. 6441. 35.86 28.48 64.33

0.789 0.627 1.415 8.042 0.026 5.991 1.634
Scrubbed Coal 2
ECAO TCOLS0231411020703 01 BE3:18.4 0.80 0.26 8.29 176. 0.
43.00 2.94 2.94 612. 486. 1098. 6.36 5.05 11.42
2.545 2.022 4.567 1.507 0.047 1.063 0.290
ECAO TCOLS0611182020703 01 BG1: 8.0 0.46 0.90 4.66 53. 0.
43.00 2.94 2.94 220. 175. 395. 2.29 1.82 4.10
0.526 0.418 0.944 1.847 0.010 0.382 0.104
ECAOOHTOLBS0432142020304 01 BG2:17.4 0.34 1.09 0.87 49. 0.
42.70 2.94 2.94 170. 104. 274. 2.10 1.28 3.38
0.363 0.221 0.584 1.836 0.001 0.315 0.086
ECAOINTSVBS0431182020103 01 BG1: 8.0 0.23 0.30 2.73 85. 0.
43.00 2.94 2.94 353. 280. 633. 3.17 2.52 5.68
0.360 0.286 0.645 0.853 0.008 0.529 0.144
ECAO TSYBS0432192020204 01 BE1: 6.1 0.37 0.42 3.65 63. 0.
42.70 2.94 2.94 261. 174. 435. 2.92 1.94 4.86
0.546 0.363 0.909 1.032 0.009 0.453 0.123
ECAO TSZBS0431142010103 01 BE1: 6.1 0.46 0.44 2.80 69. 0.
43.00 2.94 2.94 286. 191. 477. 2.96 1.97 4.93
0.679 0.451 1.130 1.086 0.007 0.460 0.125
Unscrubbed Coal_NOx 3
ECAO TSBBN0241042020102 01 BA2: 5.2 0.25 1.10 3.31 343. 0.
32.20 2.45 2.45 1424. 947. 2371. 13.91 9.26 23.17
1.711 1.139 2.850 12.743 0.038 2.158 0.588
ECAOOHTSEBN0441142020102 01 BD2:12.5 0.24 1.50 8.03 129. 0.
32.20 2.45 2.45 0. 149. 149. 0.00 1.42 1.42
0.000 0.171 0.171 1.064 0.006 0.132 0.036
ECAOOHTSEBN0441142020102 01 BA2: 5.2 0.24 1.10 3.31 129. 0.
32.20 2.45 2.45 448. 124. 573. 4.27 1.18 5.45
0.514 0.142 0.656 2.996 0.009 0.507 0.138
ECAOOHTSCBC0441041020101 01 BA2: 5.2 0.05 1.10 3.31 500. 0.
23.00 2.51 2.51 2075. 1381. 3456. 20.11 13.38 33.49
0.523 0.348 0.871 18.419 0.055 3.119 0.851
ECAOWVTSFBN0641042020102 01 BA2: 5.2 0.31 1.10 3.31 555. 0.
26.60 2.45 2.45 2303. 1532. 3836. 21.27 14.15 35.43
3.329 2.215 5.544 19.485 0.059 3.299 0.900
ECAO TSHBN0441042020302 01 BA2: 5.2 0.26 1.10 0.57 180. 0.
32.20 2.45 2.45 747. 497. 1244. 7.46 4.96 12.42
0.977 0.650 1.627 6.831 0.004 1.157 0.315
Unscrubbed Coal 4
ECAO TCOLU0211412050710 01 BD2:12.5 0.40 1.50 12.54 8. 0.
32.00 1.54 1.54 33. 26. 60. 0.35 0.27 0.62
0.069 0.055 0.124 0.465 0.004 0.058 0.016
ECAO TCOLU0231082020110 01 BD2:12.5 0.46 1.50 8.03 28. 0.
32.00 1.54 1.54 75. 41. 116. 0.78 0.43 1.21
0.179 0.099 0.278 0.905 0.005 0.112 0.031
ECAO TCOLU0241082050710 01 BA2: 5.2 0.11 0.28 5.17 204. 0.
11.70 1.54 1.54 847. 563. 1410. 7.62 5.07 12.69
0.419 0.279 0.698 1.745 0.033 1.182 0.322
ECAO TCOLU0411181050710 01 BB2: 4.1 0.52 1.00 4.10 39. 0.
32.00 1.54 1.54 162. 129. 290. 1.68 1.34 3.02
0.433 0.344 0.778 1.510 0.006 0.281 0.077
ECAO TCOLU0411142050710 01 BE2:10.4 0.48 2.20 10.45 111. 0.
32.00 1.54 1.54 461. 366. 827. 4.79 3.81 8.60
1.145 0.909 2.054 9.456 0.045 0.800 0.218
ECAO TCOLU0431141020110 01 BB2: 4.1 0.80 1.00 2.62 94. 0.
32.00 1.54 0.00 175. 0. 175. 1.82 0.00 1.82
0.727 0.000 0.727 0.909 0.002 0.169 0.046
ECAO TCOLU0431142020110 01 BB2: 4.1 0.46 1.00 2.62 106. 0.
32.00 1.54 1.54 369. 225. 593. 3.83 2.34 6.17
0.881 0.537 1.419 3.084 0.008 0.574 0.157
ECAO TCOLU0431182020110 01 BB2: 4.1 0.45 1.00 2.62 179. 0.
32.00 1.54 1.54 622. 494. 1117. 6.47 5.14 11.61
1.443 1.146 2.589 5.806 0.015 1.081 0.295
ECAO TCOLU0431192020110 01 BE1: 6.1 0.46 2.20 3.89 155. 0.

32.00 1.54 1.54 413. 328. 742. 4.30 3.42 7.72
0.989 0.786 1.775 8.487 0.015 0.718 0.196
ECAO TCOLU0431042050710 01 BA2: 5.2 0.48 1.10 5.17 72. 0.
32.00 1.54 1.54 250. 153. 403. 2.60 1.59 4.19
0.622 0.379 1.001 2.304 0.011 0.390 0.106
ECAO TCOLU0611062020210 01 BD1: 5.1 0.46 1.50 4.56 40. 0.
32.00 1.54 1.54 166. 132. 298. 1.73 1.37 3.10
0.397 0.315 0.712 2.323 0.007 0.288 0.079
ECAO TCOLU0631202020110 01 BB2: 4.1 0.46 1.00 2.62 32. 0.
32.00 1.54 1.54 133. 88. 221. 1.38 0.92 2.30
0.318 0.211 0.529 1.150 0.003 0.214 0.058
ECAOVATCOLU0331062020110 01 BA2: 5.2 0.40 1.10 3.31 90. 0.
32.00 1.54 1.54 313. 191. 504. 3.25 1.98 5.24
0.651 0.397 1.047 2.880 0.009 0.488 0.133
ECAO TOLBU0411181020710 01 BE1: 6.1 0.93 2.20 6.08 14. 0.
26.40 1.54 1.54 58. 46. 104. 0.60 0.48 1.08
0.281 0.223 0.504 1.193 0.003 0.101 0.028
ECAO TOLBU0411182020710 01 BE1: 6.1 0.25 2.20 6.08 12. 0.
32.00 1.54 1.54 50. 40. 89. 0.52 0.41 0.93
0.065 0.052 0.117 1.022 0.003 0.087 0.024
ECAO TOLBU0412181020210 01 BB2: 4.1 0.85 1.00 3.69 39. 0.
32.00 1.54 1.54 162. 129. 290. 2.21 1.75 3.96
0.943 0.749 1.692 1.979 0.007 0.369 0.101
ECAO TOLBU0412181020710 01 BF1: 6.8 0.88 3.00 6.83 20. 0.
32.00 1.54 1.54 83. 66. 149. 1.16 0.92 2.08
0.511 0.406 0.917 3.127 0.007 0.194 0.053
ECAO TOLBU0611191020710 01 BG1: 8.0 0.91 5.00 8.04 10. 0.
32.00 1.54 1.54 42. 33. 74. 0.43 0.34 0.77
0.197 0.156 0.353 1.936 0.003 0.072 0.020
ECAO TOLBU0631191040110 01 BE1: 6.1 0.52 2.20 3.95 26. 0.
26.40 1.54 1.54 69. 38. 108. 0.72 0.40 1.12
0.189 0.105 0.294 1.233 0.002 0.104 0.028
ECAO TOLBU0632052020110 01 BD2:12.5 0.47 1.50 8.03 145. 0.
32.00 1.54 1.54 387. 214. 601. 4.41 2.44 6.85
1.032 0.571 1.603 5.138 0.027 0.638 0.174
ECAO TOLBU0641052020110 01 BD2:12.5 0.38 1.50 8.03 137. 0.
32.00 1.54 1.54 476. 290. 767. 4.93 3.00 7.94
0.939 0.572 1.512 5.951 0.032 0.739 0.202
ECAOMDTOLBU0231082020110 01 BD2:12.5 0.43 1.50 8.03 86. 0.
32.00 1.54 1.54 299. 182. 481. 2.96 1.80 4.76
0.633 0.386 1.019 3.572 0.019 0.444 0.121
ECAO TRRBU0432042020110 01 BA2: 5.2 0.30 1.10 3.31 129. 0.
32.00 1.54 1.54 344. 190. 535. 4.15 2.30 6.45
0.623 0.345 0.968 3.549 0.011 0.601 0.164
ECAO TSBBU0632061020110 01 BA2: 5.2 0.56 1.10 3.31 141. 0.
32.00 1.54 1.54 262. 208. 470. 3.11 2.47 5.58
0.864 0.686 1.550 3.068 0.009 0.519 0.142
ECAO TSBBU0632062020110 01 BA2: 5.2 0.41 1.10 3.31 72. 0.
32.00 1.54 1.54 192. 106. 298. 2.37 1.31 3.68
0.481 0.266 0.747 2.023 0.006 0.343 0.093
ECAO TSBBU0641062020110 01 BA2: 5.2 0.41 1.10 3.31 116. 0.
32.00 1.54 1.54 403. 320. 724. 4.02 3.19 7.21
0.827 0.657 1.484 3.963 0.012 0.671 0.183
ECAOOHTSBBU0431042020110 01 BA2: 5.2 0.37 1.10 3.31 188. 0.
32.00 1.54 1.54 654. 519. 1173. 6.56 5.21 11.77
1.200 0.953 2.153 6.471 0.019 1.096 0.299
ECAOOHTSBBU0441042020110 01 BA2: 5.2 0.42 1.10 3.31 633. 0.
30.10 1.54 1.54 2627. 1748. 4375. 24.38 16.22 40.60
5.168 3.438 8.607 22.329 0.067 3.781 1.031
ECAOOHTSEBU0441142020110 01 BD2:12.5 0.38 1.50 8.03 652. 0.
32.00 1.54 1.54 741. 230. 971. 7.31 2.27 9.57
1.377 0.427 1.804 7.179 0.038 0.891 0.243
ECAOOHTSEBU0441142020110 01 BA2: 5.2 0.38 1.10 3.31 652. 0.
32.00 1.54 1.54 1029. 849. 1878. 10.15 8.37 18.51
1.912 1.578 3.490 10.183 0.031 1.724 0.470

```
  ECAO  TSESU0441172020110 01                SB1: 4.5 0.28  0.65  4.41   957.   0.
  26.70  1.54  1.54     3972.      3154.      7126.    39.55    31.41    70.96
   5.438    4.319    9.757      22.992       0.157         6.846         1.867
  ECAO  TSFBU0431142020210 01                BB1: 3.4 0.35  1.00  3.07   252.   0.
  32.00  1.54  1.54      876.       534.      1410.     8.95     5.46    14.41
   1.589    0.968    2.557       7.203       0.022         1.341         0.366
  ECAO  TSFBU0432142020110 01                BB2: 4.1 0.35  1.00  2.62    95.   0.
  32.00  1.54  1.54      177.       140.       317.     2.03     1.61     3.64
   0.351    0.279    0.629       1.819       0.005         0.339         0.092
  ECAOOHTSGBU0441141010110 01                BD2:12.5 0.54  1.50  8.03   230.   0.
  32.00  1.54  1.54      335.         0.       335.     3.47     0.00     3.47
   0.933    0.000    0.933       2.603       0.014         0.323         0.088
  ECAOOHTSGBU0441141010110 01                BA2: 5.2 0.54  1.10  3.31   230.   0.
  32.00  1.54  1.54      279.       340.       618.     2.89     3.52     6.41
   0.778    0.947    1.725       3.526       0.011         0.597         0.163
  ECAO  TSHBU0441182020110 01                BB2: 4.1 0.35  1.00  2.62   634.   0.
  28.30  1.54  1.54     2631.      1751.      4382.    27.35    18.20    45.55
   4.760    3.166    7.926      22.776       0.060         4.242         1.157
  ECAO  TSHBU0441042020310 01                BA2: 5.2 0.40  1.10  0.57   540.   0.
  32.00  1.54  1.54     2241.      1491.      3732.    21.62    14.38    36.00
   4.334    2.883    7.217      19.798       0.010         3.352         0.914
  ECAO  TSHBU0642182020210 01                BB1: 3.4 0.42  1.00  3.07   108.   0.
  32.00  1.54  1.54      375.       229.       604.     4.21     2.57     6.77
   0.886    0.540    1.426       3.387       0.010         0.631         0.172
  ECAO  TSJBU0441202020410 01                BB2: 4.1 0.40  1.00  0.82   560.   0.
  32.00  1.54  1.54     2324.      1546.      3870.    23.81    15.84    39.65
   4.750    3.160    7.910      19.825       0.016         3.692         1.007
  ECAOINTSKBU0432182020110 01                BB2: 4.1 0.33  1.00  2.62   161.   0.
  32.00  1.54  1.54      560.       341.       901.     6.45     3.93    10.38
   1.071    0.652    1.723       5.190       0.014         0.967         0.264
  ECAOINTSKBU0432182020210 01                BB1: 3.4 0.39  1.00  3.07    56.   0.
  32.00  1.54  1.54      195.       119.       313.     2.24     1.37     3.61
   0.437    0.267    0.704       1.805       0.006         0.336         0.092
  ECAO  TSLBU0231052020110 01                BD2:12.5 0.35  1.50  8.03    98.   0.
  32.00  1.54  1.54      341.       208.       548.     3.53     2.15     5.69
   0.617    0.376    0.993       4.267       0.023         0.530         0.144
  ECAO  TSLBU0232052020110 01                BD2:12.5 0.33  1.50  8.03    98.   0.
  32.00  1.54  1.54      341.       208.       548.     3.65     2.22     5.87
   0.600    0.366    0.966       4.406       0.024         0.547         0.149
  ECAO  TSLBU0411141020710 01                BF3:18.7 0.86  3.00 18.69    66.   0.
  30.70  1.54  1.54      274.       110.       384.     2.85     1.15     4.00
   1.226    0.493    1.718       5.994       0.037         0.372         0.101
  ECAO  TSLBU0411141020710 01                BF2:11.1 0.86  3.00 11.09    66.   0.
  30.70  1.54  1.54        0.       107.       107.     0.00     1.12     1.12
   0.000    0.480    0.480       1.676       0.006         0.104         0.028
  ECAO  TSLBU0411141050710 01                BF3:18.7 0.83  3.00 18.69    20.   0.
  32.00  1.54  1.54       83.         0.        83.     0.86     0.00     0.86
   0.360    0.000    0.360       1.295       0.008         0.080         0.022
  ECAO  TSLBU0411141050710 01                BF2:11.1 0.83  3.00 11.09    20.   0.
  32.00  1.54  1.54        0.        66.        66.     0.00     0.69     0.69
   0.000    0.286    0.286       1.028       0.004         0.064         0.017
  ECAO  TSLBU0412141020710 01                BG2:17.4 0.86  5.00 17.43    12.   0.
  32.00  1.54  1.54       50.        40.        89.     0.64     0.51     1.15
   0.275    0.218    0.493       2.868       0.010         0.107         0.029
  ECAO  TSLBU0632182020110 01                BB2: 4.1 0.44  1.00  2.62    71.   0.
  32.00  1.54  1.54      189.       150.       340.     2.32     1.84     4.17
   0.509    0.404    0.912       2.083       0.005         0.388         0.106
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  ECAO  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   876.   0.
 133.00  0.91  0.91     4165.      3040.      7204.    43.98    32.10    76.08
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   873.   0.
 154.00  0.66  0.66     4176.      3033.      7208.    42.42    30.80    73.22
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1017.   0.
 206.80  1.14  1.14     4308.      2371.      6679.    46.18    25.42    71.61
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1238.   0.
 109.60  0.60  0.60     5895.      3864.      9759.    60.50    39.66   100.16
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   875.   0.
 183.00  0.91  0.91     3917.      2490.      6407.    42.50    27.02    69.52
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  ECAO  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  1109.   0.
  15.00  0.00  0.00     1806.      1169.      2974.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  ECAO  CC   0222   000000 00              GAS      0.03  0.00  0.00  1491.   0.
  14.00  1.03  1.03     3006.      2275.      5281.    22.83    17.27    40.10
   0.377    0.285    0.662       0.000       0.000         2.128         0.580
  ECAO  CC   0422   000000 00              GAS      0.02  0.00  0.00  4912.   0.
  13.90  1.03  1.03     9904.      7597.     17501.    74.28    56.98   131.26
   0.743    0.570    1.313       0.000       0.000         6.966         1.900
IGCC                           10
  ECAO  IGCC 0441142050710 00              BG2:17.4 0.10  0.00  0.87   262.   0.
  31.40  1.00  1.00     1135.       877.      2013.     8.26     6.38    14.64
   0.413    0.319    0.732       0.000       0.006         1.364         0.372
Turbine                        11
  ECAO  CT   0222   000000 00              GAS      0.08  0.00  0.00   892.   0.
   2.80  1.03  1.03      619.       462.      1081.     6.77     5.05    11.82
   0.271    0.202    0.473       0.000       0.000         0.627         0.171
  ECAO  CT   0412   000000 00              GAS      0.09  0.00  0.00   165.   0.
   3.50  1.03  1.03      115.        85.       200.     1.24     0.93     2.17
   0.056    0.042    0.097       0.000       0.000         0.115         0.031
  ECAO  CT   0422   000000 00              GAS      0.08  0.00  0.00  9144.   0.
   2.90  1.03  1.03     1056.       528.      1584.    11.58     5.79    17.36
   0.480    0.240    0.721       0.000       0.000         0.922         0.251
  ECAO  CT   0612   000000 00              GAS      0.13  0.00  0.00     6.   0.
  11.20  1.03  1.03        4.         3.         7.     0.04     0.03     0.08
   0.003    0.002    0.005       0.000       0.000         0.004         0.001
  ECAO  CT   0622   000000 00              GAS      0.08  0.00  0.00  4215.   0.
   2.80  1.03  1.03     1813.       795.      2609.    19.83     8.70    28.53
   0.803    0.352    1.155       0.000       0.000         1.514         0.413
  ECAOVACT   0322   000000 00              GAS      0.08  0.00  0.00   250.   0.
   2.80  1.03  1.03      174.       129.       303.     1.90     1.41     3.31
   0.076    0.057    0.132       0.000       0.000         0.176         0.048
Biomass                        12
  ECAO  BIOMS00  42 000000 00              B1-: 0.6 0.02  0.08  0.57    84.   0.
  44.80  5.36  5.36      364.       281.       645.     3.36     2.59     5.95
   0.034    0.026    0.060       0.238       0.002         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  ECAO  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    12.   0.
  78.60 10.48 10.48       54.        41.        95.     0.73     0.56     1.29
   0.090    0.069    0.159       0.000       0.000         0.000         0.000
Wind                           15
  ECAO  WIND 00     000000 00              NONE     0.00  0.00 71.00   105.   0.
  26.40  0.00  0.00      164.        92.       256.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  ECAO  OTHER00     000000 00              NONE     0.00  0.00  0.00    90.   0.
 103.60  0.00  0.00      397.       313.       710.     4.36     3.44     7.81
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                   19
  ECAO  WASTE062    000000 00              WASTE    0.42  0.00  0.00    60.   0.
```

```
 103.60  0.00  0.00      268.       205.       473.     2.95     2.25     5.20
   0.614    0.468    1.082       0.000       0.000         0.000         0.000
Pump Storage                    20
  ECAO  PUMPS00     000000 00              NONE     0.00  0.00 71.00   245.   0.
   6.50  0.00  0.00      152.       110.       262.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                    21
Cgn_Coal                        22
  ECAO  CGCOU0231412050710 01            BA2: 5.2 0.40  1.10  5.17   127.   0.
  17.40  1.54  1.54      431.       267.       697.     4.29     2.65     6.94
   0.859    0.532    1.391       3.817       0.018         0.646         0.176
  ECAO  CGCOU0411142050710 01            BB2: 4.1 0.48  1.00  4.10     1.   0.
  17.40  1.54  1.54        4.         3.         7.     0.03     0.03     0.06
   0.008    0.006    0.014       0.030       0.000         0.006         0.002
  ECAO  CGCOS0631041050303 01            BE2:10.4 0.55  0.53  0.31    60.   0.
  23.10  2.94  2.94      243.       196.       439.     1.86     1.50     3.37
   0.514    0.415    0.930       0.889       0.001         0.314         0.086
Cgn_Gas                         23
  ECAO  CGCT 0412   000000 00            GAS      0.10  0.00  0.00    17.   0.
   2.80  1.03  1.03       12.         9.        21.     0.11     0.08     0.20
   0.006    0.004    0.010       0.000       0.000         0.010         0.003
  ECAO  CGCT 0422   000000 00            GAS      0.08  0.00  0.00    78.   0.
   2.80  1.03  1.03       54.        40.        95.     0.59     0.44     1.03
   0.024    0.018    0.041       0.000       0.000         0.055         0.015
  ECAO  CGCT 0612   000000 00            GAS      0.08  0.00  0.00     7.   0.
   2.80  1.03  1.03        5.         4.         8.     0.05     0.04     0.09
   0.002    0.002    0.004       0.000       0.000         0.005         0.001
  ECAO  CGCC 0422   000000 00            GAS      0.02  0.00  0.00   525.   0.
  13.90  1.03  1.03     1059.       812.      1871.     7.94     6.09    14.03
   0.079    0.061    0.140       0.000       0.000         0.745         0.203
Cgn_Oil                         24
Cgn_Other                       25
  ECAO  CGBIO00  42 000000 00            B1-: 0.6 0.02  0.08  0.57     6.   0.
  44.80  5.36  5.36       26.        20.        46.     0.22     0.17     0.39
   0.002    0.002    0.004       0.016       0.000         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
  ECAO  TSDBC0641061020101 01     LO01     BF2:11.1 0.06  0.15  1.11   783.  19.
  34.48  3.85  3.85     3250.      2582.      5832.    30.66    24.35    55.02
   0.966    0.767    1.733       4.126       0.031         5.124         1.397
  ECAOOHTSDBC0441041020101 01     ML02     BF2:11.1 0.05  0.12  1.11  1062.  21.
  41.50  3.42  3.42     4408.      3501.      7910.    39.91    31.70    71.61
   1.038    0.824    1.862       4.297       0.040         6.669         1.819
  ECAOOHTSDBC0441042020101 01     ML02     BF2:11.1 0.04  0.12  1.11   490.  24.
  36.28  3.50  3.50     2032.      1613.      3645.    20.52    16.30    36.82
   0.421    0.334    0.755       2.209       0.020         3.429         0.935
  ECAO  TSEBC0641042020101 01     LO02     BG1: 8.0 0.05  0.25  0.80  4112.  21.
  33.05  3.84  3.84    17065.     13553.     30618.   159.35   126.56   285.91
   3.904    3.101    7.005      35.739       0.115        26.625         7.261
  ECAO  TSBBC0641062020101 01     ML01     BD1: 5.1 0.04  0.06  0.51   220.  28.
  38.58  3.53  3.53      914.       726.      1640.     9.52     7.56    17.08
   0.195    0.155    0.350       0.512       0.004         1.591         0.434
  ECAO  TSBBC0641062020201 01     ML02     BD1: 5.1 0.04  0.06  0.51   294.  30.
  38.38  3.52  3.52     1219.       968.      2187.    12.49     9.92    22.41
```

0.262 0.208 0.471 0.672 0.006 2.086 0.569
ECAOOHTSBBC0441041020201 01 LD01 BD1: 5.1 0.06 0.15 3.04 617. 18.
32.58 4.48 4.48 2560. 2033. 4593. 25.36 20.14 45.51
0.812 0.645 1.456 3.413 0.069 4.238 1.156
ECAO TSLBC0441181020101 01 LO01 BG1: 8.0 0.05 0.25 0.80 1234. 21.
35.28 3.89 3.89 5119. 4066. 9185. 50.72 40.28 91.00
1.344 1.067 2.411 11.375 0.037 8.474 2.311
ECAO TSLBC0441182020101 01 LO01 BG1: 8.0 0.05 0.25 0.80 617. 22.
31.19 3.91 3.91 2560. 2033. 4593. 25.79 20.48 46.28
0.580 0.461 1.041 5.784 0.019 4.309 1.175
ECAO TSGSC0441201020101 01 ML01 BF1: 6.8 0.09 0.12 0.68 1001. 28.
44.50 3.46 3.46 4152. 3298. 7450. 39.55 31.41 70.96
1.740 1.382 3.122 4.257 0.024 6.608 1.802
ECAOOHTSIBC0441041020101 01 ML01 BF2:11.1 0.06 0.12 1.11 993. 28.
44.70 3.46 3.46 4120. 3272. 7392. 39.00 30.97 69.97
1.228 0.976 2.204 4.198 0.039 6.516 1.777
ECAO TSXBC0641202020201 01 LO01 BG1: 8.0 0.04 0.25 0.80 490. 24.
31.89 3.91 3.91 2032. 1613. 3645. 20.49 16.28 36.77
0.420 0.334 0.754 4.596 0.015 3.424 0.934
Ret.ExistSNCR & Scrub 39
ECAO TSBBN0241041020102 01 ML02 BF2:11.1 0.35 0.12 3.77 490. 23.
35.87 3.42 3.42 2032. 1613. 3645. 19.84 15.76 35.59
3.472 2.757 6.229 2.136 0.067 3.315 0.904
ECAOOHTSDBN0441042020102 01 ML01 BF2:11.1 0.23 0.12 3.77 160. 32.
45.39 3.41 3.41 662. 526. 1188. 6.37 5.06 11.42
0.748 0.594 1.342 0.685 0.022 1.064 0.290
ECAOOHTSGBN0441142020102 01 LO01 BG1: 8.0 0.19 0.25 2.73 584. 21.
34.87 3.76 3.76 2426. 1926. 4352. 22.16 17.60 39.76
2.161 1.716 3.877 4.970 0.054 3.703 1.010
ECAO TSHBN0441041020102 01 LO01 BG1: 8.0 0.38 0.25 2.73 587. 22.
34.97 3.81 3.81 2438. 1936. 4374. 23.64 18.77 42.41
4.432 3.520 7.952 5.301 0.058 3.949 1.077
ECAO TSHBN0441042020102 01 LO01 BG1: 8.0 0.28 0.25 2.73 587. 22.
34.97 3.80 3.80 2438. 1936. 4374. 23.41 18.59 41.99
3.253 2.584 5.837 5.249 0.057 3.911 1.067
Ret.SCR 40
ECAO TSABU0441201020110 01 SCR2 BB2: 4.1 0.08 1.00 2.62 480. 11.
32.60 2.57 2.57 1992. 1582. 3574. 18.78 14.92 33.69
0.723 0.574 1.297 16.847 0.044 3.138 0.856
ECAOOHTSBBU0441041020110 01 SCR2 BA2: 5.2 0.06 1.10 3.31 134. 12.
32.70 2.60 2.60 556. 370. 926. 5.26 3.50 8.76
0.171 0.114 0.285 4.818 0.014 0.816 0.222
ECAOOHTSCBU0441041020210 01 SCR2 BA2: 5.2 0.05 1.10 4.65 600. 7.
22.80 2.41 2.41 2490. 1657. 4147. 23.25 15.47 38.72
0.593 0.394 0.987 21.295 0.090 3.606 0.983
ECAOVATSDBU0341061020110 01 SCR2 BA2: 5.2 0.07 1.10 3.31 925. 10.
32.50 2.52 2.52 3839. 3049. 6888. 34.71 27.57 62.28
1.284 1.020 2.304 34.254 0.103 5.800 1.582
ECAO TSESU0441171010110 01 SCR2 SB1: 4.5 0.07 1.00 4.41 431. 8.
26.80 2.45 2.45 1789. 1190. 2979. 17.59 11.70 29.29
0.580 0.386 0.967 14.647 0.065 2.826 0.771
ECAOINTSFBU0441201010110 01 SCR2 BB2: 4.1 0.09 1.00 2.62 500. 7.
32.40 2.43 2.43 2075. 1648. 3723. 17.79 14.13 31.91
0.765 0.607 1.372 15.956 0.042 2.972 0.810
ECAOKYTSFBU0641201020210 01 SCR2 BB2: 4.1 0.05 1.00 3.69 983. 7.
22.80 2.43 2.43 4080. 3240. 7320. 41.71 33.13 74.84
1.105 0.878 1.983 37.422 0.138 6.970 1.901
ECAOKYTSFBU0641202020210 01 SCR1 BB2: 4.1 0.05 1.00 3.69 509. 7.
26.80 2.43 2.43 2112. 1678. 3790. 21.37 16.97 38.34
0.534 0.424 0.958 19.169 0.071 3.570 0.974
ECAOWVTSFBU0641042020110 01 SCR1 BA2: 5.2 0.05 1.10 3.31 552. 7.
32.40 2.42 2.42 2291. 1819. 4110. 20.18 16.03 36.20
0.504 0.401 0.905 19.912 0.060 3.371 0.919
ECAO TSHBU0641041020110 01 SCR2 BA2: 5.2 0.07 1.10 3.31 680. 11.
32.60 2.56 2.56 2822. 1878. 4700. 26.27 17.48 43.75

0.946 0.629 1.575 24.065 0.072 4.074 1.111
ECAO TSHBU0641182020110 01 SCR1 BB2: 4.1 0.05 1.00 2.62 1003. 10.
28.00 2.54 2.54 4163. 2769. 6932. 42.79 28.47 71.25
1.070 0.712 1.781 35.627 0.093 6.635 1.810
ECAO TSHBU0642181020110 01 SCR2 BB2: 4.1 0.05 1.00 2.62 105. 13.
32.70 2.64 2.64 436. 290. 726. 4.83 3.21 8.04
0.121 0.080 0.201 4.022 0.011 0.749 0.204
ECAO TSISU0441171010110 01 SCR2 SB1: 4.5 0.06 1.00 4.41 469. 8.
26.80 2.44 2.44 1946. 1295. 3241. 19.22 12.79 32.01
0.567 0.377 0.944 16.006 0.071 3.088 0.842
ECAO TSXBU0641041020110 01 SCR2 BA2: 5.2 0.07 0.66 3.31 290. 12.
32.60 2.59 2.59 1204. 956. 2159. 11.40 9.05 20.45
0.410 0.326 0.736 6.750 0.034 1.905 0.519
Ret.ExistScrub & SCR 41
ECAO TSVBS0641201020103 01 SCR2 BG1: 8.0 0.06 0.25 0.80 633. 9.
43.20 3.88 3.88 2627. 2086. 4714. 26.75 21.25 48.00
0.843 0.669 1.512 6.000 0.019 4.470 1.219
ECAO TSVBS0641202020103 01 SCR1 BG1: 8.0 0.05 0.25 0.80 401. 10.
43.30 3.94 3.94 1664. 1322. 2986. 15.62 12.40 28.02
0.390 0.310 0.701 3.503 0.011 2.609 0.712
ECAOINTSVBS0441181010103 01 SCR2 BG1: 8.0 0.07 0.35 0.80 480. 10.
43.30 3.92 3.92 1992. 1582. 3574. 19.11 15.17 34.28
0.716 0.569 1.286 6.085 0.014 3.192 0.871
ECAOINTSVBS0441182020103 01 SCR1 BG1: 8.0 0.05 0.79 0.80 1664. 8.
42.50 3.85 3.85 6906. 5485. 12391. 71.46 56.76 128.22
1.787 1.419 3.205 50.647 0.052 11.940 3.256
ECAO TSXBS0241042020103 01 SCR1 BF2:11.1 0.05 0.24 1.11 1080. 7.
41.60 3.82 3.82 4482. 3560. 8042. 42.47 33.73 76.20
1.062 0.843 1.905 9.144 0.042 7.096 1.935
ECAO TSXBS0241042020703 01 SCR1 BF2:11.1 0.05 0.24 1.11 1566. 6.
43.10 3.79 3.79 729. 5162. 5891. 7.17 50.78 57.95
0.179 1.270 1.449 7.041 0.032 5.397 1.472
ECAO TSXBS0241042020703 01 SCR1 BE2:10.4 0.05 0.18 1.04 1566. 6.
43.10 3.79 3.79 5770. 0. 5770. 56.77 0.00 56.77
1.419 0.000 1.419 5.058 0.030 5.287 1.442
ECAO TSXBS0242412020703 01 SCR1 BE3:18.4 0.05 0.18 1.84 134. 12.
43.70 4.00 4.00 556. 442. 998. 6.32 5.02 11.34
0.158 0.126 0.284 0.998 0.010 1.056 0.288
ECAO TSXBS0441142020103 01 SCR1 BE2:10.4 0.05 0.26 1.04 750. 8.
42.20 3.86 3.86 3113. 2472. 5585. 31.77 25.23 57.00
0.794 0.631 1.425 7.524 0.030 5.308 1.448
ECAO TSXBS0641201020103 01 SCR2 BG1: 8.0 0.07 0.56 0.80 469. 10.
43.30 3.92 3.92 1946. 1546. 3492. 20.39 16.19 36.58
0.683 0.542 1.225 10.334 0.015 3.406 0.929
ECAO TSXBS0641042020103 01 SCR1 BE2:10.4 0.05 0.26 1.04 1228. 7.
41.00 3.81 3.81 5096. 4048. 9144. 49.80 39.55 89.36
1.245 0.989 2.234 11.795 0.047 8.321 2.269
ECAO TSXBS0641202020103 01 SCR1 BG1: 8.0 0.05 0.55 0.80 993. 9.
42.30 3.91 3.91 4121. 3273. 7394. 42.35 33.63 75.98
1.059 0.841 1.900 20.895 0.031 7.076 1.930
ECAO TSXBS0642201020103 01 SCR2 BG1: 8.0 0.06 0.50 0.80 155. 11.
43.60 3.98 3.98 643. 511. 1154. 7.14 5.67 12.80
0.218 0.173 0.390 3.201 0.005 1.192 0.325
ECAO TSYBS0441192020103 01 SCR1 BG1: 8.0 0.05 0.70 0.80 1722. 8.
41.00 3.85 3.85 7147. 5676. 12823. 69.89 55.51 125.39
1.747 1.388 3.135 43.887 0.050 11.677 3.185
ECAOOHTSYBS0441042020103 01 SCR1 BG1: 8.0 0.05 0.45 0.80 1300. 6.
23.40 3.78 3.78 5395. 4285. 9680. 51.37 40.80 92.18
1.284 1.020 2.304 20.509 0.037 8.584 2.341
ECAOOHTSBBS0441041020304 01 SCR2 BD2:12.5 0.06 0.15 0.63 132. 12.
43.70 4.00 4.00 548. 435. 983. 5.07 4.03 9.10
0.165 0.131 0.296 0.682 0.003 0.847 0.231
Ret.SNCR 42
ECAO TCOLU0431041020110 01 HNO1 BA2: 5.2 0.53 1.10 3.31 123. 4.
32.60 2.46 2.46 428. 261. 688. 4.45 2.71 7.16

```
  1.176    0.717    1.893       3.937       0.012         0.667         0.182
ECAO  TCOLU0631051020110 01     HNO1     BD2:12.5 0.52  1.50  8.03    46.   4.
32.50  2.46  2.46      123.        97.       220.     1.28     1.01     2.29
  0.332    0.264    0.595       1.717       0.009         0.213         0.058
ECAOINTSCBU0431181020110 01     HNO1     BB2: 4.1 0.40  1.00  2.62   255.   3.
32.30  2.46  2.46      886.       540.      1427.     9.23     5.63    14.86
  1.865    1.137    3.002       7.431       0.019         1.384         0.377
ECAOINTSCBU0432181020110 01     HNO1     BB2: 4.1 0.36  1.00  2.62    95.   2.
32.30  2.46  2.46      330.       201.       532.     3.55     2.16     5.71
  0.635    0.387    1.023       2.856       0.007         0.532         0.145
Ret.ExistScrub & SNCR         43
ECAO  TCOLS0631041050303 01     HNO1     BE2:10.4 0.36  0.53  0.31    84.   3.
23.40  3.86  3.86      349.       277.       625.     3.63     2.88     6.51
  0.651    0.517    1.168       1.717       0.001         0.606         0.165
ECAOINTSVBS0432181020103 01     HNO1     BG1: 8.0 0.32  0.30  2.73    90.   3.
43.30  3.86  3.86      374.       297.       670.     4.38     3.48     7.85
  0.711    0.565    1.276       1.178       0.011         0.731         0.199
Ret.SCR+Scrb                  44
ECAOOHTOLBU0441142020110 01     RO01     BG1: 8.0 0.05  0.25  0.80   238.  46.
44.89  3.90  3.90      987.       784.      1771.     9.75     7.75    17.50
  0.244    0.194    0.438       2.188       0.007         1.630         0.445
ECAOOHTSABU0441051010110 01     SO01     BG1: 8.0 0.06  0.25  0.80   401.  50.
45.89  3.90  3.90     1666.      1323.      2989.    15.97    12.68    28.65
  0.495    0.393    0.888       3.581       0.012         2.668         0.728
ECAOOHTSABU0441051020110 01     SO01     BG1: 8.0 0.06  0.25  0.80   372.  52.
46.29  3.91  3.91     1544.      1226.      2770.    14.86    11.80    26.66
  0.468    0.372    0.840       3.332       0.011         2.482         0.677
ECAO  TSBBU0241042020110 01     RO01     BG1: 8.0 0.05  0.25  0.80   550.  30.
35.37  3.82  3.82     2283.      1814.      4097.    22.93    18.21    41.14
  0.573    0.455    1.029       5.143       0.017         3.831         1.045
ECAOINTSCBU0441182020110 01     RL02     BF1: 6.8 0.05  0.12  0.68  1265.  33.
36.67  3.45  3.45     5249.      4169.      9419.    53.75    42.69    96.44
  1.344    1.067    2.411       5.786       0.033         8.981         2.449
ECAO  TSDBU0641062020110 01     RL01     BE1: 6.1 0.05  0.09  0.61   255.  34.
43.39  3.47  3.47     1056.       839.      1895.    10.11     8.03    18.14
  0.253    0.201    0.454       0.798       0.006         1.689         0.461
ECAOWVTSDBU0641051010110 01     SL01     BF2:11.1 0.06  0.12  1.11   611.  40.
44.79  3.50  3.50     2538.      2015.      4553.    24.41    19.39    43.80
  0.769    0.611    1.380       2.628       0.024         4.078         1.112
ECAOOHTSEBU0441142020110 01     RL01     BF2:11.1 0.05  0.12  1.11   140.  44.
45.89  3.57  3.57      580.       461.      1041.     5.84     4.64    10.48
  0.146    0.116    0.262       0.629       0.006         0.976         0.266
ECAO  TSFBU0441142020110 01     RO01     BG1: 8.0 0.05  0.25  0.80   583.  28.
35.07  3.73  3.73     2422.      1923.      4345.    22.47    17.85    40.32
  0.562    0.446    1.008       5.039       0.016         3.754         1.024
ECAO  TSFSU0441202020110 01     RO02     BG1: 8.0 0.05  0.25  0.80  2545.  26.
21.61  3.77  3.77    10564.      8390.     18954.   105.62    83.88   189.50
  2.640    2.097    4.738      23.688       0.076        17.647         4.813
ECAOOHTSGBU0441142020110 01     RL02     BF2:11.1 0.05  0.12  1.11   925.  32.
37.29  3.41  3.41     3840.      3049.      6889.    37.57    29.84    67.42
  0.939    0.746    1.685       4.045       0.037         6.278         1.712
ECAO  TSGSU0441201020210 01     SL01     BF1: 6.8 0.09  0.12  0.68   191.  40.
44.89  3.51  3.51      792.       629.      1422.     7.70     6.12    13.81
  0.362    0.287    0.649       0.829       0.005         1.286         0.351
ECAO  TSHBU0441041020110 01     SO01     BG1: 8.0 0.05  0.25  0.80   573.  29.
35.17  3.76  3.76     2377.      1888.      4265.    22.54    17.90    40.45
  0.609    0.483    1.092       5.056       0.016         3.766         1.027
ECAO  TSHBU0641042020110 01     RL02     BF2:11.1 0.05  0.12  1.11   431.  32.
42.09  3.36  3.36     1788.      1420.      3208.    16.29    12.94    29.22
  0.407    0.323    0.731       1.753       0.016         2.721         0.742
ECAO  TSKBU0441042020110 01     RL02     BF2:11.1 0.05  0.12  1.11   638.  37.
39.91  3.46  3.46     2649.      2104.      4753.    26.14    20.76    46.89
  0.653    0.519    1.172       2.814       0.026         4.367         1.191
ECAO  TSLBU0241052020110 01     RL01     BF2:11.1 0.05  0.12  1.11   134.  48.
47.09  3.64  3.64      557.       442.       999.     5.91     4.69    10.60
```

```
   0.148    0.117    0.265       0.636       0.006         0.987         0.269
  ECAO  TSBBU0241041020110 01     SCR2ML02 BF2:11.1 0.06  0.12  1.11   979.  30.
  35.97  3.37  3.37     4063.      3227.      7290.    38.13    30.28    68.41
   1.087    0.863    1.950       4.105       0.038         6.371         1.737
  ECAOINTSBBU0441182020110 01     ML01SCR1 BF1: 6.8 0.05  0.12  0.68   370.  50.
  41.87  3.61  3.61     1536.      1220.      2756.    15.43    12.25    27.68
   0.386    0.306    0.692       1.661       0.009         2.578         0.703
  ECAOWVTSDBU0641051010110 01     SCR2ML01 BF2:11.1 0.06  0.12  1.11   153.  40.
  44.90  3.50  3.50      636.       505.      1140.     6.11     4.86    10.97
   0.193    0.153    0.346       0.658       0.006         1.021         0.279
  ECAOOHTSEBU0442142020110 01     ML01SCR1 BF2:11.1 0.05  0.12  1.11   153.  45.
  46.29  3.64  3.64      634.       503.      1137.     6.88     5.47    12.35
   0.172    0.137    0.309       0.741       0.007         1.150         0.314
  ECAOWVTSFBU0641041020110 01     SCR2LD01 BE2:10.4 0.05  0.22  6.69  1566.  23.
  31.57  4.28  4.28     6501.      5163.     11664.    61.51    48.85   110.37
   1.599    1.270    2.870      12.140       0.369        10.278         2.803
  ECAO  TSHBU0441042020110 01     ML02SCR1 BF2:11.1 0.05  0.12  1.11  2252.  32.
  37.70  3.39  3.39     9345.      7422.     16767.    89.26    70.90   160.16
   2.232    1.772    4.004       9.610       0.089        14.914         4.068
  ECAO  TSJBU0441051020110 01     SCR2LO01 BG1: 8.0 0.06  0.25  0.80   563.  29.
  35.27  3.74  3.74     2336.      1856.      4192.    21.64    17.19    38.83
   0.682    0.541    1.223       4.854       0.016         3.616         0.986
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: ERCT     (Emissions By Plant)
--------------------------------------------------
```

```
            NOx                  SO2         MER           CO2          Carbon

                      Generation                        Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  ERCTTXTSXLS2342302020103 02              LF2: 9.8 0.30  0.77  5.48  4341.   0.
  41.00  2.94  2.94    11077.     11464.     22541.   123.25   127.56   250.81
  18.734   19.390   38.124      97.102       0.688        24.505          6.683
  ERCTTXTSXLS2342302030303 02              LF2: 9.8 0.15  0.60  4.21   300.   0.
  23.10  2.94  2.94     1245.       989.      2234.    13.39    10.63    24.02
   0.984    0.781    1.765       7.209       0.051         2.347          0.640
  ERCTTXTSXSS2341292020303 01              SD2: 6.7 0.30  0.11  1.81   530.   0.
  23.10  2.94  2.94     2200.      1747.      3947.    20.97    16.65    37.62
   3.145    2.498    5.643       2.133       0.034         3.629          0.990
  ERCTTXTSXSS3541292020103 01              SD2: 6.7 0.46  0.12  5.63   676.   0.
  35.60  2.94  2.94     2805.      2228.      5034.    27.32    21.70    49.01
   6.242    4.958   11.199       3.019       0.138         4.729          1.290
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  ERCTTXTSABU2341292020210 01              BB1: 3.4 0.30  0.73  3.07   632.   0.
  22.40  1.54  1.54     2623.      2083.      4706.    25.01    19.86    44.87
   3.751    2.979    6.730      16.489       0.069         4.178          1.140
  ERCTTXTSBSU2341292020110 01              SB2: 6.5 0.32  0.69  6.29  1160.   0.
  22.40  1.54  1.54     4814.      3824.      8638.    46.94    37.28    84.22
   7.440    5.909   13.348      29.139       0.265         8.125          2.216
Oil/Gas Steam                  5
  ERCTTXSTGAU2011   000000 00              GAS      0.26  0.00  0.00    96.   0.
  21.40  0.00  2.57        0.       101.       101.     0.00     1.07     1.07
   0.000    0.142    0.142       0.000       0.000         0.057          0.016
  ERCTTXSTGAU2211   000000 00              GAS      0.26  0.00  0.00    12.   0.
  21.40  0.00  2.57        0.        13.        13.     0.00     0.13     0.13
   0.000    0.018    0.018       0.000       0.000         0.007          0.002
  ERCTTXSTGAU2221   000000 00              GAS      0.26  0.00  0.00    30.   0.
  21.40  0.00  2.57        0.        32.        32.     0.00     0.34     0.34
   0.000    0.044    0.044       0.000       0.000         0.018          0.005
  ERCTTXSTGAU2511   000000 00              GAS      0.26  0.00  0.00   144.   0.
  21.40  0.00  2.57        0.       152.       152.     0.00     1.61     1.61
   0.000    0.212    0.212       0.000       0.000         0.085          0.023
  ERCTTXSTGAU2521   000000 00              GAS      0.26  0.00  0.00   205.   0.
  21.40  0.00  2.57        0.       216.       216.     0.00     2.29     2.29
   0.000    0.302    0.302       0.000       0.000         0.122          0.033
  ERCTTXSTGAU2711   000000 00              GAS      0.26  0.00  0.00    11.   0.
  10.70  0.00  2.57        0.        12.        12.     0.00     0.12     0.12
   0.000    0.016    0.016       0.000       0.000         0.007          0.002
  ERCTTXSTHSU2021   000000 00              GAS      0.19  0.00  0.00  1078.   0.
  20.60  0.00  2.57        0.       941.       941.     0.00     9.36     9.36
   0.000    0.908    0.908       0.000       0.000         0.497          0.136
  ERCTTXSTHSU2221   000000 00              GAS      0.27  0.00  0.00  3693.   0.
  20.00  0.00  2.57        0.      4520.      4520.     0.00    44.25    44.25
   0.000    6.018    6.018       0.000       0.000         2.348          0.640
  ERCTTXSTHSU2321   000000 00              GAS      0.14  0.00  0.00   356.   0.
  19.70  0.00  2.57        0.       657.       657.     0.00     6.51     6.51
   0.000    0.455    0.455       0.000       0.000         0.345          0.094
  ERCTTXSTHSU2521   000000 00              GAS      0.48  0.00  0.00  2276.   0.
  20.40  2.57  2.57     1905.      4200.      6105.    18.67    41.18    59.85
   4.500    9.924   14.424       0.000       0.000         3.176          0.866
  ERCTTXSTLSU2021   000000 00              GAS      0.27  0.00  0.00   285.   0.
```

```
  20.70  0.00  2.57        0.       225.       225.     0.00     2.31     2.31
   0.000    0.315    0.315       0.000       0.000         0.123         0.033
  ERCTTXSTLSU2221   000000 00              GAS      0.22  0.00  0.00  4296.   0.
  20.60  0.00  2.57        0.      4529.      4529.     0.00    45.85    45.85
   0.000    5.043    5.043       0.000       0.000         2.433         0.664
  ERCTTXSTLSU2222   000000 00              GAS      0.21  0.00  0.00  1942.   0.
  20.80  0.00  2.57        0.       358.       358.     0.00     4.06     4.06
   0.000    0.432    0.432       0.000       0.000         0.215         0.059
  ERCTTXSTLSU2321   000000 00              GAS      0.12  0.00  0.00   405.   0.
  19.70  0.00  2.57        0.       747.       747.     0.00     7.47     7.47
   0.000    0.448    0.448       0.000       0.000         0.397         0.108
  ERCTTXSTLSU2322   000000 00              GAS      0.15  0.00  0.00   146.   0.
  19.70  0.00  2.57        0.       154.       154.     0.00     1.70     1.70
   0.000    0.130    0.130       0.000       0.000         0.090         0.025
  ERCTTXSTLSU2422   000000 00              GAS      0.28  0.00  0.00    87.   0.
  21.40  0.00  2.57        0.        69.        69.     0.00     0.76     0.76
   0.000    0.106    0.106       0.000       0.000         0.040         0.011
  ERCTTXSTLSU2511   000000 00              GAS      0.54  0.00  0.00    11.   0.
  21.40  0.00  2.57        0.        12.        12.     0.00     0.12     0.12
   0.000    0.033    0.033       0.000       0.000         0.007         0.002
  ERCTTXSTLSU2512   000000 00              GAS      0.50  0.00  0.00    75.   0.
  21.40  0.00  2.57        0.        79.        79.     0.00     0.91     0.91
   0.000    0.229    0.229       0.000       0.000         0.048         0.013
  ERCTTXSTLSU2521   000000 00              GAS      0.29  0.00  0.00   726.   0.
  20.20  0.00  2.57        0.      1022.      1022.     0.00    10.67    10.67
   0.000    1.558    1.558       0.000       0.000         0.566         0.154
  ERCTTXSTLSU2522   000000 00              GAS      0.28  0.00  0.00   386.   0.
  21.10  0.00  2.57        0.       407.       407.     0.00     4.69     4.69
   0.000    0.658    0.658       0.000       0.000         0.249         0.068
  ERCTTXSTLSU3521   000000 00              GAS      0.11  0.00  0.00   204.   0.
  19.70  0.00  2.57        0.       376.       376.     0.00     3.86     3.86
   0.000    0.212    0.212       0.000       0.000         0.205         0.056
  ERCTTXSTLSU3522   000000 00              GAS      0.12  0.00  0.00   111.   0.
  19.70  0.00  2.57        0.       117.       117.     0.00     1.30     1.30
   0.000    0.078    0.078       0.000       0.000         0.069         0.019
Oil/Gas Steam_Nox                6
  ERCTTXSTHSC1821   000000 00              GAS      0.03  0.00  0.00   739.   0.
  20.90  0.00  2.67        0.       779.       779.     0.00     7.62     7.62
   0.000    0.122    0.122       0.000       0.000         0.404         0.110
  ERCTTXSTHSC1921   000000 00              GAS      0.03  0.00  0.00   750.   0.
  20.90  0.00  2.67        0.       677.       677.     0.00     6.92     6.92
   0.000    0.090    0.090       0.000       0.000         0.367         0.100
  ERCTTXSTHSO2521   000000 00              GAS      0.16  0.00  0.00   116.   0.
  20.00  0.00  3.02        0.       214.       214.     0.00     2.07     2.07
   0.000    0.166    0.166       0.000       0.000         0.110         0.030
  ERCTTXSTHSO3521   000000 00              GAS      0.15  0.00  0.00   200.   0.
  20.00  0.00  3.02        0.       369.       369.     0.00     3.59     3.59
   0.000    0.269    0.269       0.000       0.000         0.191         0.052
  ERCTTXSTLSO2021   000000 00              GAS      0.14  0.00  0.00   940.   0.
  21.60  0.00  3.02        0.       991.       991.     0.00     9.93     9.93
   0.000    0.675    0.675       0.000       0.000         0.527         0.144
Nuclear                          7
  ERCT  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1196.   0.
  81.80  0.52  0.52     5713.      4027.      9741.    60.68    42.77   103.46
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCT  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1329.   0.
  92.40  0.48  0.48     5786.      4875.     10661.    58.71    49.47   108.19
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCT  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1241.   0.
  81.80  0.52  0.52     5479.      4265.      9745.    57.92    45.09   103.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCT  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1314.   0.
  92.40  0.48  0.48     5755.      4603.     10358.    60.38    48.30   108.68
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
```

```
  ERCT  HYDRO00     000000 00                HYDRO    0.00  0.00  0.00   356.   0.
  15.50  0.00  0.00      431.       365.       796.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  ERCTTXCC   1922   000000 00                GAS      0.02  0.00  0.00  1108.   0.
  13.90  1.03  1.03      745.      2230.      2975.     5.59    16.72    22.31
   0.056    0.167    0.223       0.000       0.000         1.184         0.323
  ERCTTXCC   1923   000000 00                GAS      0.16  0.00  0.00   463.   0.
  19.90  1.03  1.03       94.        79.       173.     0.97     0.82     1.80
   0.078    0.065    0.143       0.000       0.000         0.095         0.026
  ERCTTXCC   1924   000000 00                GAS      0.16  0.00  0.00   162.   0.
  19.90  0.00  1.03        0.        28.        28.     0.00     0.35     0.35
   0.000    0.028    0.028       0.000       0.000         0.019         0.005
  ERCTTXCC   2313   000000 00                GAS      0.13  0.00  0.00     7.   0.
  19.90  1.03  1.03        2.         4.         5.     0.02     0.04     0.06
   0.001    0.003    0.004       0.000       0.000         0.003         0.001
  ERCTTXCC   2322   000000 00                GAS      0.02  0.00  0.00  4495.   0.
  13.90  1.03  1.03    15109.     15453.     30562.   113.32   115.90   229.22
   1.133    1.159    2.292       0.000       0.000        12.165         3.318
  ERCTTXCC   2513   000000 00                GAS      0.16  0.00  0.00    22.   0.
  19.90  1.03  1.03        5.        34.        39.     0.05     0.32     0.37
   0.004    0.026    0.029       0.000       0.000         0.020         0.005
  ERCTTXCC   2514   000000 00                GAS      0.16  0.00  0.00     3.   0.
  19.90  1.03  1.03        1.         2.         2.     0.01     0.02     0.03
   0.001    0.001    0.002       0.000       0.000         0.001         0.000
  ERCTTXCC   2523   000000 00                GAS      0.14  0.00  0.00   103.   0.
  19.90  1.03  1.03       23.       159.       182.     0.22     1.52     1.73
   0.015    0.105    0.120       0.000       0.000         0.092         0.025
  ERCTTXCC   2524   000000 00                GAS      0.10  0.00  0.00    36.   0.
  19.90  1.03  1.03        8.        19.        27.     0.10     0.22     0.32
   0.005    0.011    0.016       0.000       0.000         0.017         0.005
  ERCTTXCC   2722   000000 00                GAS      0.02  0.00  0.00  8847.   0.
  13.90  1.03  1.03    32058.     25238.     57296.   240.43   189.29   429.72
   2.404    1.893    4.297       0.000       0.000        22.805         6.220
  ERCTTXCC   3522   000000 00                GAS      0.02  0.00  0.00  2623.   0.
  13.90  1.03  1.03    11756.      9017.     20773.    88.17    67.63   155.80
   0.882    0.676    1.558       0.000       0.000         8.268         2.255
  ERCTTXCC   3523   000000 00                GAS      0.13  0.00  0.00   258.   0.
  13.90  1.03  1.03       58.       133.       191.     0.64     1.47     2.12
   0.042    0.097    0.139       0.000       0.000         0.112         0.031
  ERCTTXCC   19    (b)                      GAS      0.02  0.00  0.00  3580.  68.
  11.70  1.95  1.95    16465.     11883.     28349.   116.18    83.85   200.03
   1.162    0.838    2.000       0.000       0.000        10.616         2.895
IGCC                           10
Turbine                        11
  ERCTTXCT   1814   000000 00                GAS      0.10  0.00  0.00   153.   0.
  11.20  0.00  1.03        0.        26.        26.     0.00     0.38     0.38
   0.000    0.019    0.019       0.000       0.000         0.020         0.005
  ERCTTXCT   1922   000000 00                GAS      0.08  0.00  0.00   980.   0.
   2.80  1.03  1.03      226.       169.       395.     2.48     1.84     4.32
   0.099    0.074    0.173       0.000       0.000         0.229         0.063
  ERCTTXCT   1923   000000 00                GAS      0.10  0.00  0.00   348.   0.
  11.20  0.00  1.03        0.        60.        60.     0.00     0.80     0.80
   0.000    0.041    0.041       0.000       0.000         0.043         0.012
  ERCTTXCT   1924   000000 00                GAS      0.10  0.00  0.00   354.   0.
  11.20  0.00  1.03        0.        61.        61.     0.00     0.91     0.91
   0.000    0.046    0.046       0.000       0.000         0.048         0.013
  ERCTTXCT   2114   000000 00                GAS      0.10  0.00  0.00     5.   0.
   2.80  1.03  1.03        1.         1.         2.     0.02     0.01     0.03
   0.001    0.001    0.001       0.000       0.000         0.002         0.000
  ERCTTXCT   2122   000000 00                GAS      0.08  0.00  0.00    85.   0.
   2.80  1.03  1.03       20.        44.        64.     0.21     0.48     0.70
   0.009    0.019    0.028       0.000       0.000         0.037         0.010
  ERCTTXCT   2214   000000 00                GAS      0.10  0.00  0.00    56.   0.
  11.20  1.03  1.03       13.        10.        23.     0.18     0.14     0.32
```

```
   0.009    0.007    0.016       0.000       0.000         0.017         0.005
  ERCTTXCT   2312   000000 00              GAS      0.10  0.00  0.00     7.   0.
   7.80  1.03  1.03        2.        11.        13.     0.02     0.11     0.13
   0.001    0.006    0.007       0.000       0.000         0.007         0.002
  ERCTTXCT   2313   000000 00              GAS      0.10  0.00  0.00    21.   0.
  11.20  1.03  1.03        5.         4.         8.     0.07     0.05     0.11
   0.003    0.002    0.006       0.000       0.000         0.006         0.002
  ERCTTXCT   2314   000000 00              GAS      0.10  0.00  0.00     4.   0.
  11.20  1.03  1.03        1.         1.         2.     0.01     0.01     0.02
   0.001    0.001    0.001       0.000       0.000         0.001         0.000
  ERCTTXCT   2322   000000 00              GAS      0.09  0.00  0.00   460.   0.
   2.80  1.03  1.03      106.       238.       344.     1.20     2.69     3.90
   0.055    0.124    0.179       0.000       0.000         0.207         0.056
  ERCTTXCT   2323   000000 00              GAS      0.10  0.00  0.00   200.   0.
   2.80  1.03  1.03       46.        34.        81.     0.59     0.44     1.03
   0.030    0.022    0.052       0.000       0.000         0.055         0.015
  ERCTTXCT   2414   000000 00              GAS      0.10  0.00  0.00     7.   0.
  11.20  1.03  1.03        2.         1.         3.     0.02     0.02     0.04
   0.001    0.001    0.002       0.000       0.000         0.002         0.001
  ERCTTXCT   2512   000000 00              GAS      0.10  0.00  0.00     8.   0.
   8.80  1.03  1.03        2.        12.        14.     0.02     0.13     0.15
   0.001    0.007    0.008       0.000       0.000         0.008         0.002
  ERCTTXCT   2514   000000 00              GAS      0.10  0.00  0.00    27.   0.
  11.20  1.03  1.03        6.         5.        11.     0.09     0.07     0.16
   0.004    0.003    0.008       0.000       0.000         0.008         0.002
  ERCTTXCT   2722   000000 00              GAS      0.08  0.00  0.00   275.   0.
   2.80  1.03  1.03       64.       142.       206.     0.69     1.56     2.25
   0.028    0.062    0.090       0.000       0.000         0.119         0.033
  ERCTTXCT   3514   000000 00              GAS      0.10  0.00  0.00     1.   0.
   2.80  1.03  1.03        0.         0.         0.     0.00     0.00     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCTTXCT   3522   000000 00              GAS      0.10  0.00  0.00   260.   0.
   2.80  1.03  1.03       60.       135.       195.     0.69     1.55     2.24
   0.035    0.079    0.114       0.000       0.000         0.119         0.032
  ERCTTXCT   3523   000000 00              GAS      0.10  0.00  0.00   502.   0.
   3.10  1.03  1.03      116.        86.       202.     1.43     1.06     2.49
   0.073    0.054    0.127       0.000       0.000         0.132         0.036
  ERCTTXCT   3524   000000 00              GAS      0.10  0.00  0.00   293.   0.
   3.30  1.03  1.03       68.        50.       118.     0.97     0.72     1.69
   0.049    0.037    0.086       0.000       0.000         0.090         0.025
  ERCTTXACT  19    (b)                     GAS      0.10  0.00  0.00  3318.  52.
   7.80  2.94  2.94     2166.      5057.      7223.    18.52    43.24    61.76
   0.926    2.162    3.088       0.000       0.000         3.277         0.894
Biomass                        12
Geothermal                     13
Landfill Gas                   14
  ERCT  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    67.   0.
  78.60 10.48 10.48      300.       229.       528.     4.09     3.12     7.21
   0.503    0.384    0.887       0.000       0.000         0.000         0.000
  ERCTTXLG   19    (a)                     WASTE    0.25  0.00  0.00    61. 174.
  78.60 10.48 10.48      264.       190.       454.     2.64     1.90     4.54
   0.325    0.234    0.559       0.000       0.000         0.000         0.000
Wind                           15
  ERCT  WIND 00     000000 00              NONE     0.00  0.00 71.00   703.   0.
  26.40  0.00  0.00     1465.       823.      2288.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCTTXWIN410     (a)                     NONE     0.00  0.00 71.00   224. 138.
  26.40  0.00  0.00      387.       199.       586.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
  ERCT  SOLAR00     000000 00              NONE     0.00  0.00 71.00     1.   0.
  47.00  0.00  0.00        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other               18
```

```
  ERCT  OTHER00     000000 00                NONE     0.00  0.00  0.00    10.   0.
 103.60  0.00  0.00        44.        35.        79.     0.48     0.38     0.87
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                   19
  ERCTTXWASTE271    000000 00                WASTE    0.42  0.00  0.00     2.   0.
 108.60  0.00  0.00         9.         7.        16.     0.10     0.08     0.17
   0.020    0.016    0.036       0.000       0.000         0.000         0.000
Pump Storage                   20
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
  ERCTTXCGCT 1912   000000 00                GAS      0.10  0.00  0.00    17.   0.
   7.80  1.03  1.03         4.         3.         7.     0.04     0.03     0.07
   0.002    0.001    0.003       0.000       0.000         0.003         0.001
  ERCTTXCGCT 1922   000000 00                GAS      0.08  0.00  0.00  2033.   0.
   2.80  1.03  1.03       470.       350.       820.     4.92     3.67     8.59
   0.202    0.150    0.352       0.000       0.000         0.456         0.124
  ERCTTXCGCT 2312   000000 00                GAS      0.10  0.00  0.00    10.   0.
   2.80  1.03  1.03         2.        16.        18.     0.02     0.15     0.17
   0.001    0.007    0.009       0.000       0.000         0.009         0.002
  ERCTTXCGCT 2711   000000 00                GAS      0.10  0.00  0.00    22.   0.
   2.80  1.03  1.03        15.        34.        49.     0.13     0.29     0.42
   0.007    0.015    0.021       0.000       0.000         0.022         0.006
  ERCTTXCGCC 1911   000000 00                GAS      0.13  0.00  0.00    19.   0.
  13.90  1.03  1.03        13.        29.        42.     0.07     0.16     0.23
   0.004    0.010    0.015       0.000       0.000         0.012         0.003
  ERCTTXCGCC 1912   000000 00                GAS      0.13  0.00  0.00    28.   0.
  13.90  1.03  1.03         6.         5.        11.     0.05     0.04     0.08
   0.003    0.002    0.005       0.000       0.000         0.004         0.001
  ERCTTXCGCC 1913   000000 00                GAS      0.13  0.00  0.00    18.   0.
  19.90  1.03  1.03         4.         3.         7.     0.04     0.03     0.07
   0.002    0.002    0.004       0.000       0.000         0.004         0.001
  ERCTTXCGCC 1921   000000 00                GAS      0.13  0.00  0.00   368.   0.
  19.90  1.03  1.03        82.       569.       651.     0.51     3.55     4.06
   0.034    0.232    0.266       0.000       0.000         0.216         0.059
  ERCTTXCGCC 1922   000000 00                GAS      0.04  0.00  0.00  2500.   0.
  14.00  1.03  1.03      1680.      3867.      5547.    12.71    29.24    41.95
   0.273    0.629    0.902       0.000       0.000         2.226         0.607
  ERCTTXCGCC 1923   000000 00                GAS      0.13  0.00  0.00   110.   0.
  14.30  1.03  1.03        25.        19.        43.     0.23     0.17     0.40
   0.015    0.011    0.026       0.000       0.000         0.021         0.006
  ERCTTXCGCC 2313   000000 00                GAS      0.13  0.00  0.00     3.   0.
  14.00  1.03  1.03         2.         5.         7.     0.02     0.04     0.06
   0.001    0.003    0.004       0.000       0.000         0.003         0.001
  ERCTTXCGCC 2322   000000 00                GAS      0.02  0.00  0.00  1513.   0.
  13.90  1.03  1.03      3051.      3901.      6952.    22.88    29.26    52.14
   0.229    0.293    0.521       0.000       0.000         2.767         0.755
  ERCTTXCGCC 2323   000000 00                GAS      0.13  0.00  0.00   246.   0.
  13.90  1.03  1.03        55.       380.       436.     0.57     3.92     4.48
   0.037    0.256    0.294       0.000       0.000         0.238         0.065
  ERCTTXCGCC 2711   000000 00                GAS      0.13  0.00  0.00    81.   0.
  13.90  1.03  1.03       363.       278.       641.     1.98     1.52     3.49
   0.129    0.099    0.229       0.000       0.000         0.185         0.051
  ERCTTXCGCC 2722   000000 00                GAS      0.06  0.00  0.00   782.   0.
  13.90  1.03  1.03      1577.      2016.      3593.    12.28    15.70    27.98
   0.362    0.463    0.825       0.000       0.000         1.485         0.405
  ERCTTXCGCC 3513   000000 00                GAS      0.13  0.00  0.00    77.   0.
  14.90  1.03  1.03        17.       119.       136.     0.18     1.23     1.41
   0.012    0.081    0.092       0.000       0.000         0.075         0.020
  ERCTTXCGCC 3523   000000 00                GAS      0.13  0.00  0.00   217.   0.
  14.90  1.03  1.03        49.       336.       384.     0.48     3.30     3.78
   0.031    0.216    0.248       0.000       0.000         0.201         0.055
Cgn_Oil                        24
Cgn_Other                      25
  ERCTTXCGFWT192    000000 00                WASTE    0.42  0.00 20.87   162.   0.
```

```
 103.60  0.00  0.00       36.        28.        64.     0.21     0.16     0.38
   0.045    0.034    0.079       0.000       0.004         0.000         0.000
  ERCT  CGOTH00     000000 00              NONE     0.00  0.00  0.00     1.   0.
 103.60  0.00  0.00        4.         3.         8.     0.03     0.03     0.06
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
  ERCTTXTSBLU2241302020110 02     LD01     LF2: 9.8 0.30  0.29  9.79   563.  19.
  32.27  3.64  3.64     2336.      1855.      4192.    24.86    19.74    44.60
   3.729    2.962    6.691       6.468       0.218         4.358         1.189
  ERCTTXTSBLU2241302020410 02     LD01     LF2: 9.8 0.30  0.29  9.79  1116.  19.
  32.27  3.64  3.64        0.      3679.      3679.     0.00    39.27    39.27
   0.000    5.890    5.890       5.694       0.192         3.837         1.046
  ERCTTXTSBLU2241302020410 02     LD01     LF1: 5.9 0.30  0.29  5.88  1116.  19.
  32.27  3.64  3.64     4632.         0.      4632.    49.44     0.00    49.44
   7.416    0.000    7.416       7.169       0.145         4.831         1.317
  ERCTTXTSBLU2242302020410 02     LD01     LF2: 9.8 0.30  0.29  9.79   242.  20.
  32.37  3.73  3.73      294.       389.       682.     3.26     4.32     7.59
   0.485    0.642    1.127       1.100       0.037         0.741         0.202
  ERCTTXTSBLU2242302020410 02     LD01     LF1: 5.9 0.30  0.29  5.88   242.  20.
  32.37  3.73  3.73      352.       280.       632.     3.92     3.11     7.03
   0.582    0.462    1.044       1.019       0.021         0.687         0.187
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  ERCTTXTSASU1941291020310 01     SCR2     SB2: 6.5 0.05  1.00  1.75   650.   7.
  22.80  0.00  2.41        0.      1377.      1377.     0.00    14.13    14.13
   0.000    0.360    0.360       7.066       0.012         1.364         0.372
  ERCTTXTSASU1941292020310 01     SCR1     SB2: 6.5 0.05  1.00  1.75  1210.   7.
  25.00  2.41  2.41     2250.      2564.      4814.    22.58    25.73    48.32
   0.565    0.643    1.208      24.159       0.042         4.662         1.271
Ret.ExistScrub & SCR           41
  ERCTTXTSXLS2341302020103 02     SCR1     LF2: 9.8 0.05  0.39  5.48  1440.   7.
  41.00  3.80  3.80     5976.      4746.     10723.    61.28    48.67   109.95
   1.532    1.217    2.749      21.523       0.301        10.743         2.930
  ERCTTXTSXLS2342302020103 02     SCR1     LF2: 9.8 0.05  0.77  5.48   189.   7.
  41.40  3.81  3.81      784.       622.      1406.     8.72     6.93    15.64
   0.218    0.173    0.391       6.057       0.043         1.529         0.417
  ERCTTXTSXSS1941292020303 01     SCR1     SD2: 6.7 0.05  0.14  1.01   555.   7.
  41.00  3.82  3.82     1032.      1176.      2208.    10.54    12.01    22.55
   0.263    0.300    0.564       1.594       0.011         2.175         0.593
  ERCTTXTSXSS2341292020103 01     SCR1     SD2: 6.7 0.05  0.07  2.28   435.   8.
  36.00  3.85  3.85     1805.      1434.      3239.    18.05    14.34    32.39
   0.451    0.358    0.810       1.134       0.037         3.125         0.852
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  ERCTTXTSBLU2242302020410 02     RD01     LF2: 9.8 0.05  0.29  9.79   311.  27.
  32.77  4.61  4.61     1291.      657.      1948.    14.36     7.31    21.66
   0.359    0.183    0.542       3.141       0.106         2.116         0.577
  ERCTTXTSBLU2242302020410 02     RD01     LF1: 5.9 0.05  0.29  5.88   311.  27.
  32.77  4.61  4.61        0.      368.       368.     0.00     4.10     4.10
   0.000    0.102    0.102       0.594       0.012         0.400         0.109
  ERCTTXTSASU2341292020110 01     SCR1ML02 BD1: 5.1 0.05  0.06  0.51   793.  35.
  34.83  3.47  3.47     3291.      2614.      5905.    34.25    27.21    61.46
```

```
   0.856    0.680    1.536       1.844       0.016         5.723         1.561
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
  ERCTTXSTHSU2021   000000 00     SCN1     GAS      0.10  0.00  0.00   185.   1.
  20.70  0.00  3.02        0.       195.       195.     0.00     1.94     1.94
   0.000    0.094    0.094       0.000       0.000         0.103         0.028
  ERCTTXSTHSU2421   000000 00     SCN1     GAS      0.16  0.00  0.00   795.   1.
  20.30  0.00  3.02        0.      1467.      1467.     0.00    14.25    14.25
   0.000    1.126    1.126       0.000       0.000         0.756         0.206
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: MACE     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  MACE  TSXBD0141031010107 01              BG1: 8.0 0.39  0.30  3.70   155.   0.
  43.10  3.85  3.85      643.       428.      1071.     6.37     4.24    10.61
   1.229    0.818    2.047       1.591       0.020         0.988         0.269
```

```
  MACE  TSZBD0241032020707 01              BG1: 8.0 0.27  0.16  4.66   144.   0.
  43.10  3.85  3.85      598.       398.       995.     6.19     4.12    10.30
   0.823    0.547    1.370       0.850       0.024         0.959         0.262
Scrubbed Coal                   2
Unscrubbed Coal_NOx             3
  MACEDETSABN0241032020102 01              BA2: 5.2 0.20  1.10  3.31   403.   0.
  22.60  2.45  2.45     1401.      1113.      2514.    14.41    11.45    25.86
   1.463    1.162    2.625      14.225       0.043         2.408         0.657
  MACE  TSBBN0231032020102 01              BA2: 5.2 0.26  1.10  3.31    84.   0.
  32.20  2.45  2.45      292.       232.       524.     3.02     2.40     5.42
   0.385    0.306    0.691       2.980       0.009         0.505         0.138
  MACE  TSBBN0241032020102 01              BA2: 5.2 0.22  1.10  3.31   167.   0.
  32.20  2.45  2.45      581.       461.      1042.     5.66     4.50    10.16
   0.620    0.492    1.113       5.588       0.017         0.946         0.258
  MACEDETSCBN0241032020102 01              BA2: 5.2 0.28  1.10  3.31   162.   0.
  26.60  2.45  2.45      672.       447.      1120.     6.21     4.13    10.35
   0.879    0.585    1.464       5.690       0.017         0.963         0.263
  MACEVATOLBO0332092020202 01              BA2: 5.2 0.20  1.10  4.65   176.   0.
  32.30  1.54  1.54      612.       260.       872.     7.26     3.08    10.34
   0.737    0.313    1.050       5.687       0.024         0.963         0.263
  MACEVATOLBO0341092020202 01              BA2: 5.2 0.23  1.10  4.65   306.   0.
  32.30  1.54  1.54     1270.       845.      2115.    12.27     8.16    20.43
   1.399    0.930    2.329      11.236       0.048         1.902         0.519
Unscrubbed Coal                 4
  MACE  TSCBU0131032020310 01              BA2: 5.2 0.39  1.10  0.57    80.   0.
  32.00  1.54  1.54      278.       221.       499.     2.86     2.28     5.14
   0.564    0.448    1.013       2.827       0.001         0.479         0.131
  MACEDETSCBU0231032020110 01              BA2: 5.2 0.40  1.10  3.31   178.   0.
  32.00  1.54  1.54      619.       491.      1110.     6.17     4.90    11.07
   1.241    0.985    2.226       6.091       0.018         1.031         0.281
  MACENJTSLBU0112032020710 01              BA2: 5.2 0.28  1.10  5.17    23.   0.
  26.40  1.54  1.54       95.        76.       171.     1.10     0.87     1.97
   0.154    0.122    0.276       1.083       0.005         0.183         0.050
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  MACE  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1155.   0.
 191.50  0.98  0.98     4925.      4237.      9162.    53.10    45.68    98.79
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1112.   0.
 165.10  0.64  0.64     5658.      3397.      9055.    59.05    35.45    94.50
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1109.   0.
 165.10  0.64  0.64     5421.      3706.      9127.    57.17    39.08    96.25
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1134.   0.
  89.40  0.46  0.46     5298.      4160.      9458.    56.23    44.15   100.38
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1207.   0.
  89.40  0.46  0.46     5879.      4188.     10067.    61.77    44.01   105.78
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   605.   0.
 254.60  1.32  1.32     2105.      2219.      4325.    22.61    23.84    46.45
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1150.   0.
 191.50  0.98  0.98     4831.      4219.      9049.    51.63    45.08    96.71
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1131.   0.
 113.80  0.78  0.78     5754.      3160.      8914.    62.27    34.20    96.47
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  MACE  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   522.   0.
  15.50  0.00  0.00     2346.      1770.      4115.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
```

```
  MACE  CC   0122   000000 00                GAS      0.04  0.00  0.00  3085.   0.
  13.90  1.03  1.03     6872.      4886.     11758.    53.04    37.71    90.76
   1.034    0.735    1.770       0.000       0.000         4.817         1.314
  MACE  CC   0123   000000 00                GAS      0.10  0.00  0.00   762.   0.
  19.50  1.03  1.03      170.       368.       539.     1.79     3.86     5.64
   0.092    0.199    0.291       0.000       0.000         0.300         0.082
  MACE  CC   0222   000000 00                GAS      0.04  0.00  0.00  1287.   0.
  13.90  1.03  1.03     4326.      3318.      7644.    33.41    25.63    59.04
   0.601    0.461    1.063       0.000       0.000         3.133         0.854
  MACE  CC   0224   000000 00                GAS      0.10  0.00  0.00   224.   0.
  13.90  0.00  1.03        0.        38.        38.     0.00     0.45     0.45
   0.000    0.023    0.023       0.000       0.000         0.024         0.007
IGCC                           10
Turbine                        11
  MACE  CT   0122   000000 00                GAS      0.08  0.00  0.00  1024.   0.
   3.40  1.03  1.03      218.       176.       394.     2.39     1.94     4.33
   0.102    0.082    0.184       0.000       0.000         0.230         0.063
  MACE  CT   0212   000000 00                GAS      0.10  0.00  0.00     3.   0.
   2.80  1.03  1.03        2.         2.         4.     0.02     0.02     0.04
   0.001    0.001    0.002       0.000       0.000         0.002         0.001
  MACE  CT   0222   000000 00                GAS      0.09  0.00  0.00  1923.   0.
   3.30  0.00  1.03        0.       331.       331.     0.00     3.64     3.64
   0.000    0.164    0.164       0.000       0.000         0.193         0.053
  MACE  CT   0223   000000 00                GAS      0.13  0.00  0.00   190.   0.
  11.20  0.00  1.03        0.        33.        33.     0.00     0.39     0.39
   0.000    0.025    0.025       0.000       0.000         0.021         0.006
  MACEVACT   0312   000000 00                GAS      0.11  0.00  0.00     4.   0.
   9.10  1.03  1.03        3.         2.         5.     0.03     0.02     0.04
   0.001    0.001    0.003       0.000       0.000         0.002         0.001
Biomass                        12
  MACE  BIOMS00  44 000000 00                B1-: 0.6 0.02  0.08  0.57     8.   0.
  44.80  5.36  5.36       35.        27.        61.     0.28     0.21     0.49
   0.003    0.002    0.005       0.020       0.000         0.000         0.000
  MACE  BIOCC0     (a)                      B1-: 0.6 0.02  0.08  0.57    52. 192.
  44.80  5.34  5.34      231.       167.       398.     1.90     1.37     3.27
   0.019    0.014    0.033       0.131       0.001         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  MACE  LFGAS00     000000 00                WASTE    0.25  0.00  0.00    24.   0.
  78.60 10.48 10.48      107.        82.       189.     1.35     1.03     2.37
   0.166    0.126    0.292       0.000       0.000         0.000         0.000
  MACE  LG   0     (a)                      WASTE    0.25  0.00  0.00   114. 174.
  78.60 10.48 10.48      493.       356.       849.     4.93     3.56     8.49
   0.607    0.438    1.045       0.000       0.000         0.000         0.000
Wind                           15
  MACE  WIND 00     000000 00                NONE     0.00  0.00 71.00    14.   0.
  26.40  0.00  0.00       20.        11.        31.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  WIN410     (a)                      NONE     0.00  0.00 71.00   115. 139.
  26.40  0.00  0.00      199.       102.       301.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
  MACE  FCELL00     000000 00                GAS      0.40  0.00  0.00    15.   0.
  15.00  2.06  2.06       31.         8.        38.     0.23     0.06     0.29
   0.046    0.011    0.057       0.000       0.000         0.015         0.004
Solar                          17
Non Fossil_Other               18
  MACE  OTHER00     000000 00                NONE     0.00  0.00 71.00   257.   0.
 103.60  0.00  0.00     1133.       893.      2026.    12.46     9.83    22.29
   0.000    0.000    0.000       0.000       0.791         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
  MACE  PUMPS00     000000 00                NONE     0.00  0.00 71.00  1280.   0.
   6.50  0.00  0.00      276.       199.       474.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
```

```
Int. Imports                    21
Cgn_Coal                        22
  MACE  CGCOU0211412050710 01              BA2: 5.2 0.40  1.10  5.17     8.   0.
  17.40  1.54  1.54       32.        26.        59.     0.29     0.23     0.52
   0.058    0.047    0.104       0.286       0.001         0.048         0.013
Cgn_Gas                         23
  MACE  CGCT 0111   000000 00              GAS      0.11  0.00  0.00     6.   0.
   2.80  1.03  1.03        4.         3.         7.     0.04     0.03     0.06
   0.002    0.001    0.003       0.000       0.000         0.003         0.001
  MACE  CGCT 0112   000000 00              GAS      0.11  0.00  0.00    13.   0.
   2.80  1.03  1.03        9.         7.        16.     0.09     0.06     0.15
   0.005    0.004    0.008       0.000       0.000         0.008         0.002
  MACE  CGCT 0122   000000 00              GAS      0.08  0.00  0.00   170.   0.
   2.80  1.03  1.03       39.        29.        69.     0.43     0.32     0.75
   0.017    0.013    0.030       0.000       0.000         0.040         0.011
  MACE  CGCT 0222   000000 00              GAS      0.08  0.00  0.00    88.   0.
   2.80  1.03  1.03       20.        15.        35.     0.22     0.17     0.39
   0.009    0.007    0.016       0.000       0.000         0.021         0.006
  MACE  CGCC 0111   000000 00              GAS      0.10  0.00  0.00    21.   0.
  13.90  1.03  1.03       94.        54.       148.     0.62     0.36     0.98
   0.033    0.019    0.051       0.000       0.000         0.052         0.014
  MACE  CGCC 0112   000000 00              GAS      0.10  0.00  0.00    16.   0.
  13.90  1.03  1.03       11.         8.        19.     0.09     0.07     0.16
   0.005    0.004    0.008       0.000       0.000         0.008         0.002
  MACE  CGCC 0113   000000 00              GAS      0.10  0.00  0.00    76.   0.
  13.90  1.03  1.03       51.        39.        90.     0.48     0.37     0.84
   0.025    0.019    0.044       0.000       0.000         0.045         0.012
  MACE  CGCC 0121   000000 00              GAS      0.10  0.00  0.00    41.   0.
  13.90  1.03  1.03      138.       106.       244.     0.91     0.70     1.62
   0.048    0.037    0.085       0.000       0.000         0.086         0.023
  MACE  CGCC 0122   000000 00              GAS      0.10  0.00  0.00  1517.   0.
  13.90  1.03  1.03     1020.       781.      1801.     8.17     6.26    14.43
   0.429    0.329    0.758       0.000       0.000         0.766         0.209
  MACE  CGCC 0123   000000 00              GAS      0.10  0.00  0.00   628.   0.
  14.20  1.03  1.03      422.       323.       745.     4.02     3.08     7.10
   0.211    0.162    0.373       0.000       0.000         0.377         0.103
  MACE  CGCC 0221   000000 00              GAS      0.19  0.00  0.00   188.   0.
  13.90  1.03  1.03      843.       485.      1327.     4.80     2.76     7.56
   0.444    0.255    0.699       0.000       0.000         0.401         0.109
  MACE  CGCC 0222   000000 00              GAS      0.02  0.00  0.00   725.   0.
  13.90  1.03  1.03     2437.      1869.      4306.    18.28    14.02    32.30
   0.183    0.140    0.323       0.000       0.000         1.714         0.467
Cgn_Oil                         24
Cgn_Other                       25
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
  MACE  TCOLC0141012050301 01     ML01     BE3:18.4 0.05  0.09  1.84   196.  30.
  24.06  3.55  3.55      813.       645.      1458.     8.63     6.85    15.48
   0.211    0.168    0.379       0.681       0.014         1.442         0.393
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
Ret.ExistScrub & SCR            41
  MACE  TSZBS0241032020203 01     SCR1     BE3:18.4 0.05  0.15  1.84   581.   9.
  43.40  3.89  3.89     2411.      1915.      4326.    24.06    19.11    43.18
```

```
   0.602    0.478    1.079       3.277       0.040         4.021         1.097
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  MACE  CGCOU0141012050710 01     ML01SCR1 BE3:18.4 0.05  0.09  1.84   183.  39.
  24.15  3.43  3.43      741.       598.      1339.     6.32     5.10    11.43
   0.158    0.128    0.286       0.503       0.011         1.064         0.290
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
  MACE  TSABA0141011020206 01     HG01     BE3:18.4 0.05  0.22  1.84   600.   4.
  48.30  4.17  4.17     2490.      1978.      4468.    23.65    18.78    42.43
   0.544    0.432    0.976       4.667       0.039         3.951         1.078
  MACE  TSDBA0141011020206 01     HG01     BE3:18.4 0.08  0.22  1.84   642.   5.
  49.40  4.16  4.16     2664.      2116.      4781.    24.66    19.58    44.24
   1.036    0.822    1.858       4.866       0.041         4.120         1.124
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: MACW     (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
```

```
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  MACW  TCOLA0241052050705 01              BG1: 8.0 0.01  0.25  0.80   520.   0.
  23.60  3.91  3.91     2158.      1714.      3872.    19.42    15.43    34.85
   0.107    0.085    0.192       4.356       0.014         3.245         0.885
  MACW  TSFBA0241412020105 01              BE3:18.4 0.05  0.11  1.84   650.   0.
  43.30  3.91  3.91     2698.      2142.      4840.    26.39    20.96    47.35
   0.594    0.472    1.065       2.604       0.044         4.409         1.203
Scrubbed Coal                  2
  MACW  TCOLS0231412050304 01              BD2:12.5 0.40  0.36  5.02    32.   0.
  23.10  2.94  2.94      133.        88.       221.     1.38     0.92     2.30
   0.277    0.184    0.461       0.414       0.006         0.214         0.058
Unscrubbed Coal_NOx            3
  MACW  TSZBN0241031020102 01              BA2: 5.2 0.37  1.10  3.31   136.   0.
  32.20  2.45  2.45      473.       201.       674.     4.71     2.00     6.71
   0.881    0.374    1.255       3.692       0.011         0.625         0.170
Unscrubbed Coal                4
  MACW  TCOLU0211412050210 01              BD2:12.5 0.40  1.50 12.54    82.   0.
  32.00  1.54  1.54      340.       270.       611.     3.54     2.81     6.35
   0.710    0.564    1.273       4.763       0.040         0.591         0.161
  MACW  TCOLU0231412050710 01              BA2: 5.2 0.40  1.10  5.17    82.   0.
  11.70  1.54  1.54      285.       226.       511.     2.96     2.35     5.32
   0.594    0.472    1.067       2.926       0.014         0.495         0.135
  MACW  TOLBU0231032020110 01              BA2: 5.2 0.37  1.10  3.31   241.   0.
  32.00  1.54  1.54      399.       170.       569.     4.15     1.76     5.91
   0.768    0.326    1.094       3.252       0.010         0.551         0.150
  MACWPATSABU0241032020110 01              BA2: 5.2 0.45  1.10  3.31   472.   0.
  32.00  1.54  1.54     1641.       957.      2598.    16.58     9.67    26.25
   3.698    2.157    5.855      14.440       0.043         2.445         0.667
  MACW  TSCBU0241032020310 01              BD2:12.5 0.38  1.50  1.38   321.   0.
  32.00  1.54  1.54     1059.       704.      1763.     9.88     6.57    16.45
   1.863    1.239    3.102      12.341       0.011         1.532         0.418
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  MACW  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1140.   0.
 142.40  0.57  0.57     5471.      3734.      9205.    57.47    39.23    96.70
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACW  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1146.   0.
 142.40  0.57  0.57     5830.      3337.      9167.    60.96    34.90    95.86
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACW  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   806.   0.
 181.30  0.93  0.93     3632.      2607.      6240.    40.49    29.07    69.56
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  MACW  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   649.   0.
  14.90  0.00  0.00     1512.       632.      2144.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  MACW  CC   0222   000000 00              GAS      0.02  0.00  0.00  2689.   0.
  13.90  1.03  1.03     5422.      4159.      9581.    40.66    31.19    71.86
   0.407    0.312    0.719       0.000       0.000         3.813         1.040
IGCC                          10
Turbine                       11
  MACW  CT   0222   000000 00              GAS      0.08  0.00  0.00   671.   0.
   2.80  1.03  1.03       25.       116.       140.     0.27     1.26     1.53
   0.011    0.051    0.061       0.000       0.000         0.081         0.022
Biomass                       12
  MACW  BIOMS00  44 000000 00              B1-: 0.6 0.02  0.08  0.57    17.   0.
  44.80  5.36  5.36       74.        57.       131.     0.68     0.53     1.20
   0.007    0.005    0.012       0.048       0.000         0.000         0.000
Geothermal                    13
Landfill Gas                  14
  MACW  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     1.   0.
```

```
  78.60 10.48 10.48        4.         3.         8.     0.06     0.05     0.11
   0.008    0.006    0.013       0.000       0.000         0.000         0.000
Wind                            15
  MACW  WIND 00     000000 00              NONE     0.00  0.00 71.00    10.   0.
  26.40  0.00  0.00       17.        10.        27.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  MACW  OTHER00     000000 00              NONE     0.00  0.00 65.04   119.   0.
 103.60  0.00  0.00      525.       414.       938.     5.77     4.55    10.32
   0.000    0.000    0.000       0.000       0.336         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
  MACW  PUMPS00     000000 00              NONE     0.00  0.00 71.00   391.   0.
   6.50  0.00  0.00      243.       175.       418.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                    21
Cgn_Coal                        22
  MACW  CGCOU0211412050710 01            BA2: 5.2 0.40  1.10  5.17    44.   0.
  21.10  1.54  1.54      178.       144.       322.     1.56     1.26     2.81
   0.312    0.252    0.563       1.546       0.007         0.262         0.071
  MACW  CGCOU0231412050710 01            BA2: 5.2 0.40  1.10  5.17    82.   0.
  11.70  1.54  1.54      332.       224.       556.     2.66     1.80     4.46
   0.534    0.361    0.894       2.453       0.012         0.415         0.113
  MACW  CGCOU0232412050710 01            BA2: 5.2 0.40  1.10  5.17   120.   0.
  15.50  1.54  1.54      407.       176.       582.     4.42     1.91     6.33
   0.887    0.383    1.269       3.482       0.016         0.590         0.161
  MACW  CGCOU0241412050710 01            BA2: 5.2 0.40  1.10  5.17   101.   0.
  11.70  1.54  1.54      409.       276.       685.     3.50     2.36     5.86
   0.701    0.474    1.175       3.222       0.015         0.546         0.149
  MACW  CGCOS0231412050304 01            BE3:18.4 0.40  0.11  7.37    42.   0.
  35.60  2.94  2.94      170.       137.       307.     1.51     1.22     2.73
   0.303    0.245    0.548       0.150       0.010         0.255         0.069
  MACW  CGCOD0231412050307 01            BE3:18.4 0.26  0.53  0.55    87.   0.
  23.30  3.84  3.84      352.       284.       636.     2.82     2.28     5.10
   0.368    0.297    0.666       1.347       0.001         0.475         0.130
Cgn_Gas                         23
  MACW  CGCT 0212   000000 00              GAS      0.13  0.00  0.00    33.   0.
   2.80  1.03  1.03        8.        17.        25.     0.08     0.17     0.25
   0.005    0.011    0.016       0.000       0.000         0.013         0.004
  MACW  CGCT 0222   000000 00              GAS      0.08  0.00  0.00   145.   0.
   2.80  0.00  1.03        0.        25.        25.     0.00     0.27     0.27
   0.000    0.011    0.011       0.000       0.000         0.014         0.004
  MACW  CGCC 0213   000000 00              GAS      0.19  0.00  0.00    80.   0.
  13.90  1.03  1.03       54.        41.        95.     0.50     0.38     0.88
   0.046    0.035    0.082       0.000       0.000         0.047         0.013
  MACW  CGCC 0223   000000 00              GAS      0.19  0.00  0.00   206.   0.
  13.90  1.03  1.03       52.       106.       158.     0.49     0.99     1.47
   0.045    0.091    0.136       0.000       0.000         0.078         0.021
Cgn_Oil                         24
Cgn_Other                       25
  MACW  CGBIO00  44 000000 00            B1-: 0.6 0.02  0.08  0.57    11.   0.
  44.80  5.36  5.36       48.        37.        85.     0.38     0.29     0.68
   0.004    0.003    0.007       0.027       0.000         0.000         0.000
  MACW  CGOTH00     000000 00              NONE     0.00  0.00 17.04    25.   0.
 103.60  0.00  0.00      108.        84.       192.     0.45     0.35     0.80
   0.000    0.000    0.000       0.000       0.007         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
```

```
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
  MACW  TSCBU0241032020310 01     ML02     BE3:18.4 0.38  0.09  0.55    65.  28.
  42.99  2.49  2.49      268.       213.       480.     2.55     2.03     4.58
   0.481    0.382    0.863       0.201       0.001         0.426         0.116
Ret.ExistSCR & Scrub           38
  MACW  TSHBC0241411020101 01     LO01     BG1: 8.0 0.06  0.25  0.80   607.  21.
  35.28  3.87  3.87     2519.      2001.      4520.    24.35    19.34    43.70
   0.792    0.629    1.420       5.462       0.018         4.069         1.110
  MACW  TSHBC0241412020101 01     LO01     BG3:28.7 0.04  0.25  2.87  2075.  20.
  34.78  3.84  3.84     8610.      6838.     15447.    80.37    63.83   144.20
   1.768    1.404    3.172      18.025       0.207        13.428         3.662
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
  MACWPATSABS0241032020103 01     SCR1     BE3:18.4 0.05  0.11  1.84   125.  12.
  43.70  4.01  4.01      519.       412.       931.     5.44     4.32     9.76
   0.136    0.108    0.244       0.537       0.009         0.909         0.248
  MACW  TSYBS0241412020103 01     SCR1     BE3:18.4 0.05  0.09  1.84  1700.   6.
  43.00  3.78  3.78     7055.      5603.     12659.    64.84    51.50   116.33
   1.621    1.287    2.908       5.119       0.107        10.833         2.955
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  MACW  TCOLU0241412050710 01     RL01     BE3:18.4 0.05  0.09  1.84   213.  57.
  28.05  3.67  3.67      886.       703.      1589.     9.40     7.47    16.87
   0.235    0.187    0.422       0.742       0.016         1.571         0.429
  MACW  TSCBU0241032020110 01     RL02     BE3:18.4 0.05  0.09  1.84  1328.  32.
  39.02  3.39  3.39     5509.      4376.      9885.    52.33    41.56    93.89
   1.308    1.039    2.347       4.131       0.086         8.743         2.385
  MACW  TSHBU0241412020110 01     SCR1LO01 BG3:28.7 0.05  0.25  2.87  1664.  25.
  36.93  3.74  3.74        0.       318.       318.     0.00     3.09     3.09
   0.000    0.077    0.077       0.386       0.004         0.288         0.078
  MACW  TSHBU0241412020110 01     SCR1LO01 BG1: 8.0 0.05  0.25  0.80  1664.  25.
  36.93  3.74  3.74      699.       126.       825.     6.78     1.22     8.00
   0.169    0.031    0.200       1.000       0.003         0.745         0.203
  MACW  TSHBU0241412020110 01     SCR1LO01 BF3:18.7 0.05  0.15  1.87  1664.  25.
  36.93  3.74  3.74     6208.         0.      6208.    60.22     0.00    60.22
   1.506    0.000    1.506       4.517       0.056         5.608         1.529
  MACW  TSHBU0241412020110 01     SCR1LO01 BF2:11.1 0.05  0.15  1.11  1664.  25.
  36.93  3.74  3.74        0.      5042.      5042.     0.00    48.90    48.90
   0.000    1.223    1.223       3.668       0.027         4.554         1.242
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
  MACW  CGCOS0232412050304 01     HG08     BE3:18.4 0.40  0.53  1.84   100.   0.
  29.40  3.10  3.10      405.       327.       731.     4.41     3.56     7.96
   0.883    0.713    1.596       2.102       0.007         0.741         0.202
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
```

```
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: MACS     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
  MACSMDTSHBO0241081010302 01              BD2:12.5 0.51  1.50  1.38   380.   0.
  32.30  1.54  1.54     1321.       805.      2126.    13.48     8.22    21.70
   3.411    2.079    5.490      16.275       0.015         2.021         0.551
Unscrubbed Coal                4
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  MACS  NUKE 00    9000000 00               NUC      0.00  0.00  0.00   875.   0.
 161.00  0.61  0.61     4352.      2860.      7212.    47.25    31.05    78.30
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACS  NUKE 00    9000000 00               NUC      0.00  0.00  0.00   850.   0.
 161.00  0.61  0.61     4141.      2712.      6854.    45.05    29.50    74.56
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  MACS  HYDRO00     000000 00               HYDRO    0.00  0.00  0.00    18.   0.
  15.50  0.00  0.00       43.        16.        59.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  MACS  CC   0222   000000 00               GAS      0.08  0.00  0.00   142.   0.
  13.90  1.03  1.03       95.       220.       315.     0.81     1.87     2.68
   0.032    0.075    0.107       0.000       0.000         0.142         0.039
  MACS  CC   1     (b)                      GAS      0.02  0.00  0.00   433.  68.
  11.70  1.95  1.95     1493.       646.      2139.    10.53     4.56    15.10
   0.105    0.046    0.151       0.000       0.000         0.801         0.218
IGCC                          10
```

```
Turbine                         11
  MACS  CT   0211   000000 00              GAS      0.13  0.00  0.00     6.   0.
   2.80  1.03  1.03        4.         9.        13.     0.04     0.09     0.12
   0.002    0.005    0.008       0.000       0.000         0.007         0.002
  MACS  CT   0212   000000 00              GAS      0.10  0.00  0.00    45.   0.
   8.60  1.03  1.03       31.        23.        55.     0.30     0.23     0.53
   0.015    0.011    0.026       0.000       0.000         0.028         0.008
  MACS  CT   0214   000000 00              GAS      0.11  0.00  0.00   378.   0.
  11.20  0.00  1.03        0.       112.       112.     0.00     1.59     1.59
   0.000    0.088    0.088       0.000       0.000         0.085         0.023
  MACS  CT   0222   000000 00              GAS      0.11  0.00  0.00   578.   0.
   9.10  1.03  1.03      134.       299.       433.     1.47     3.30     4.77
   0.082    0.185    0.267       0.000       0.000         0.253         0.069
  MACS  CT   0223   000000 00              GAS      0.13  0.00  0.00   208.   0.
  11.20  0.00  1.03        0.       108.       108.     0.00     1.43     1.43
   0.000    0.092    0.092       0.000       0.000         0.076         0.021
  MACS  CT   0224   000000 00              GAS      0.11  0.00  0.00   920.   0.
   9.80  0.00  1.03        0.       158.       158.     0.00     2.26     2.26
   0.000    0.124    0.124       0.000       0.000         0.120         0.033
  MACSVACT   0322   000000 00              GAS      0.08  0.00  0.00   169.   0.
   2.80  1.03  1.03       39.        87.       127.     0.43     0.96     1.38
   0.017    0.038    0.055       0.000       0.000         0.073         0.020
  MACS  ACT  1     (b)                     GAS      0.10  0.00  0.00   809.  53.
   7.80  2.94  2.94      569.       507.      1077.     4.87     4.34     9.21
   0.243    0.217    0.460       0.000       0.000         0.489         0.133
Biomass                         12
Geothermal                      13
Landfill Gas                    14
  MACS  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     4.   0.
  78.60 10.48 10.48       18.        14.        32.     0.24     0.19     0.43
   0.030    0.023    0.053       0.000       0.000         0.000         0.000
Wind                            15
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  MACS  OTHER00     000000 00              NONE     0.00  0.00 71.00    55.   0.
 103.60  0.00  0.00      242.       191.       434.     2.67     2.10     4.77
   0.000    0.000    0.000       0.000       0.169         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
Cgn_Gas                         23
  MACS  CGCC 0223   000000 00              GAS      0.08  0.00  0.00   277.   0.
  13.90  1.03  1.03      186.       143.       329.     1.83     1.40     3.23
   0.073    0.056    0.129       0.000       0.000         0.172         0.047
Cgn_Oil                         24
Cgn_Other                       25
  MACS  CGOTH00     000000 00              NONE     0.00  0.00 71.00    54.   0.
 103.60  0.00  0.00      234.       181.       415.     0.98     0.76     1.74
   0.000    0.000    0.000       0.000       0.062         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
  MACS  TSEBC0241072020101 01     ML02     BF2:11.1 0.05  0.12  1.11   317.  28.
```

```
  43.50  3.45  3.45     1316.      1046.      2362.    12.29     9.76    22.05
   0.277    0.220    0.496       1.323       0.012         2.054         0.560
  MACS  TSEBC0241072020201 01     LO01     BF3:18.7 0.05  0.15  1.87  1264.  21.
  23.02  3.93  3.93      949.         0.       949.     9.71     0.00     9.71
   0.223    0.000    0.223       0.728       0.009         0.904         0.247
  MACS  TSEBC0241072020201 01     LO01     BF2:11.1 0.05  0.15  1.11  1264.  21.
  23.02  3.93  3.93     4297.      4166.      8463.    43.99    42.65    86.63
   1.012    0.981    1.993       6.497       0.048         8.068         2.200
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
Ret.ExistScrub & SCR          41
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  MACS  TSEBU0241072020110 01     RL01     BF2:11.1 0.05  0.12  1.11   132.  48.
  47.09  3.61  3.61      549.       436.       984.     5.61     4.46    10.07
   0.140    0.111    0.252       0.604       0.006         0.937         0.256
  MACS  TSGBU0241082020110 01     RL01     BF2:11.1 0.05  0.12  1.11   535.  41.
  45.19  3.51  3.51     2218.      1762.      3980.    21.26    16.89    38.15
   0.532    0.422    0.954       2.289       0.021         3.552         0.969
  MACSMDTSDBU0241081020110 01     SCR2ML02 BE3:18.4 0.06  0.09  1.84  1808.  32.
  38.42  3.37  3.37     7505.      5960.     13465.    69.90    55.51   125.41
   2.237    1.776    4.013       5.518       0.116        11.679         3.185
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: WUMS     (Emissions By Plant)
--------------------------------------------------
```

```
            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  WUMSWITOLBS1312162030304 01              BG1: 8.0 0.34  2.51  0.40    22.   0.
  43.00  2.94  2.94       91.        73.       164.     1.02     0.81     1.82
   0.172    0.137    0.308       2.290       0.000         0.170         0.046
  WUMSWITSGBS1231392020104 01              BD1: 5.1 0.30  0.72  2.79    80.   0.
  43.00  2.94  2.94      278.       221.       499.     2.86     2.27     5.13
   0.429    0.340    0.769       1.842       0.007         0.477         0.130
  WUMS  TSXBS0432392020304 01              BD1: 5.1 0.31  0.08  0.25    44.   0.
  40.60  2.94  2.94      183.       121.       304.     2.20     1.46     3.66
   0.340    0.226    0.565       0.143       0.000         0.341         0.093
Unscrubbed Coal_NOx            3
  WUMSWITSDSO1332392020102 01              SB1: 4.5 0.45  0.68  4.41    82.   0.
  32.30  1.54  1.54      285.       226.       511.     3.06     2.43     5.49
   0.685    0.544    1.230       1.878       0.012         0.530         0.144
Unscrubbed Coal                4
  WUMS  TCOLU0411392020710 01              BB2: 4.1 0.46  1.00  4.10    25.   0.
  32.00  1.54  1.54      104.        82.       186.     1.08     0.86     1.94
   0.248    0.197    0.445       0.968       0.004         0.180         0.049
  WUMSWITCOLU1311162040310 01              SB2: 6.5 0.37  1.00  1.75    44.   0.
  32.00  1.54  1.54      183.       145.       328.     1.90     1.51     3.41
   0.353    0.281    0.634       1.704       0.003         0.329         0.090
  WUMSWITCOLU1311162050710 01              SB2: 6.5 0.37  1.00  6.48    22.   0.
  32.00  1.54  1.54       91.        73.       164.     0.95     0.75     1.70
   0.177    0.140    0.317       0.852       0.006         0.164         0.045
  WUMSWITCOLU1331392020110 01              BB2: 4.1 0.46  1.00  2.62    56.   0.
  32.00  1.54  1.54      195.       155.       349.     2.02     1.61     3.63
   0.466    0.370    0.836       1.816       0.005         0.338         0.092
  WUMSWITOLBU1311161020710 01              SB2: 6.5 0.78  1.00  6.48    14.   0.
  32.00  1.54  1.54       58.        46.       104.     0.60     0.48     1.08
   0.235    0.187    0.422       0.542       0.004         0.105         0.029
  WUMSWITOLBU1312162020210 01              SD2: 6.7 0.35  1.40  6.30    24.   0.
  32.00  1.54  1.54      100.        79.       179.     1.37     1.09     2.47
   0.244    0.194    0.438       1.726       0.008         0.238         0.065
  WUMSWITSCSU1341162020110 01              SB2: 6.5 0.31  0.68  6.29   525.   0.
  22.40  1.54  1.54     2179.      1730.      3909.    22.29    17.71    40.00
   3.511    2.789    6.300      13.520       0.126         3.859         1.052
  WUMSWITSCSU1341162020210 01              SB2: 6.5 0.30  1.00  6.09   525.   0.
  26.40  1.54  1.54     2179.      1450.      3628.    22.40    14.90    37.30
   3.360    2.235    5.596      18.652       0.114         3.599         0.982
  WUMSWITSCSU1341162020510 01              SB2: 6.5 0.20  0.65  1.75   334.   0.
  22.40  1.54  1.54     1386.      1101.      2487.    14.12    11.21    25.33
   1.426    1.132    2.558       8.282       0.022         2.443         0.666
  WUMSWITSCSU1342162020110 01              SB2: 6.5 0.23  0.65  6.29   402.   0.
  22.40  1.54  1.54     1668.      1325.      2993.    17.72    14.07    31.79
   2.064    1.639    3.704      10.332       0.100         3.067         0.836
  WUMSWITSDBU1241162020110 01              BB2: 4.1 0.31  0.78  2.62  1135.   0.
  32.00  1.54  1.54     2425.      1926.      4351.    21.58    17.14    38.72
   3.345    2.656    6.001      15.099       0.051         3.605         0.983
  WUMSWITSDSU1331392020110 01              SB1: 4.5 0.20  1.00  4.41    87.   0.
  32.00  1.54  1.54      302.       240.       543.     3.14     2.49     5.63
   0.319    0.253    0.572       2.816       0.012         0.543         0.148
  WUMSWITSDSU1332392020110 01              SB1: 4.5 0.43  0.78  4.41   183.   0.
```

```
  32.00  1.54  1.54      488.       388.       876.     5.84     4.64    10.48
   1.250    0.993    2.243       4.093       0.023         1.011         0.276
  WUMSWITSDSU1341392010210 01              SB1: 4.5 0.41  0.68  4.55   113.   0.
  32.00  1.54  1.54      393.       312.       705.     4.09     3.25     7.33
   0.832    0.660    1.492       2.500       0.017         0.707         0.193
  WUMSWITSDSU1342392010210 01              SB1: 4.5 0.41  0.70  4.55   113.   0.
  32.00  1.54  1.54      393.       312.       705.     4.22     3.35     7.57
   0.859    0.682    1.541       2.650       0.017         0.731         0.199
  WUMSWITSGBU1231392020110 01              BB2: 4.1 0.34  1.00  2.62   166.   0.
  32.00  1.54  1.54      577.       458.      1035.     5.96     4.73    10.69
   1.016    0.807    1.822       5.343       0.014         0.995         0.271
  WUMSWITSHBU1332162010110 01              SB2: 6.5 0.43  1.00  6.29   235.   0.
  32.00  1.54  1.54      817.       515.      1332.     9.69     6.10    15.79
   2.098    1.322    3.419       7.897       0.050         1.524         0.416
  WUMSWITSHBU1332162020110 01              SB2: 6.5 0.36  1.00  6.29    98.   0.
  32.00  1.54  1.54      341.       271.       611.     4.13     3.28     7.40
   0.736    0.585    1.321       3.701       0.023         0.714         0.195
  WUMS  TSHSU0432392020210 01              SB1: 4.5 0.32  1.00  4.28   258.   0.
  22.40  1.54  1.54      688.       547.      1235.     7.91     6.29    14.20
   1.278    1.015    2.293       7.100       0.030         1.370         0.374
  WUMS  TSJBU0431392020110 01              BB2: 4.1 0.41  1.00  2.62   177.   0.
  26.40  1.54  1.54      615.       489.      1104.     6.50     5.17    11.67
   1.333    1.059    2.392       5.835       0.015         1.087         0.296
  WUMS  TSJBU0431392020310 01              BB2: 4.1 0.40  1.00  0.45    37.   0.
  32.00  1.54  1.54      154.       102.       256.     1.60     1.06     2.66
   0.316    0.210    0.527       1.330       0.001         0.248         0.068
  WUMS  TSJBU0432392020310 01              BB2: 4.1 0.40  1.00  0.45   116.   0.
  32.00  1.54  1.54      403.       320.       724.     4.29     3.41     7.71
   0.850    0.675    1.526       3.853       0.002         0.718         0.196
  WUMS  TSKBU0411391020710 01              BB2: 4.1 0.85  1.00  4.10    47.   0.
  29.50  1.54  1.54      195.       155.       350.     2.03     1.61     3.64
   0.865    0.687    1.552       1.820       0.007         0.339         0.092
  WUMSWITSLBU1341392020110 01              BB2: 4.1 0.42  0.48  2.62   144.   0.
  32.00  1.54  1.54      598.       475.      1072.     6.08     4.83    10.91
   1.274    1.012    2.286       2.619       0.014         1.016         0.277
Oil/Gas Steam                    5
Oil/Gas Steam_Nox                6
Nuclear                          7
  WUMS  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   512.   0.
 195.70  0.98  0.98     2348.      1525.      3873.    24.42    15.86    40.28
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  WUMS  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   514.   0.
 195.70  0.98  0.98     2297.      1631.      3928.    24.13    17.13    41.26
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  WUMS  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   498.   0.
 163.50  0.83  0.83     1828.      1785.      3612.    20.11    19.64    39.75
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  WUMS  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   354.   0.
  15.40  0.00  0.00     1007.       676.      1683.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  WUMSWICC   1322   000000 00              GAS      0.12  0.00  0.00   307.   0.
  13.90  1.03  1.03      619.       475.      1094.     5.26     4.04     9.30
   0.316    0.242    0.558       0.000       0.000         0.493         0.135
  WUMS  CC   8     (b)                     GAS      0.02  0.00  0.00   568.  69.
  11.70  1.95  1.95     1671.       848.      2519.    11.79     5.98    17.77
   0.118    0.060    0.178       0.000       0.000         0.943         0.257
IGCC                            10
Turbine                         11
  WUMS  CT   0413   000000 00              GAS      0.10  0.00  0.00    23.   0.
   7.80  0.00  1.03        0.          4.          4.     0.00     0.05     0.05
   0.000    0.002    0.002       0.000       0.000         0.003         0.001
  WUMSWICT   1223   000000 00              GAS      0.10  0.00  0.00   212.   0.
   7.80  0.00  1.03        0.         25.         25.     0.00     0.32     0.32
```

```
   0.000    0.016    0.016       0.000       0.000         0.017         0.005
  WUMSWICT   1312   000000 00              GAS      0.08  0.00  0.00    18.   0.
   3.00  1.03  1.03       11.         9.        20.     0.12     0.10     0.22
   0.005    0.004    0.009       0.000       0.000         0.012         0.003
  WUMSWICT   1322   000000 00              GAS      0.08  0.00  0.00  1221.   0.
   2.80  1.03  1.03      229.       284.       513.     2.50     3.10     5.60
   0.100    0.124    0.224       0.000       0.000         0.297         0.081
  WUMS  CT   8     (a)                     GAS      0.08  0.00  0.00   266.  55.
   9.80  0.00  3.91        0.        45.        45.     0.00     0.49     0.49
   0.000    0.020    0.020       0.000       0.000         0.026         0.007
  WUMS  ACT  8     (b)                     GAS      0.10  0.00  0.00  1261.  53.
   7.80  2.94  2.94     1456.       640.      2096.    12.45     5.47    17.92
   0.623    0.274    0.896       0.000       0.000         0.951         0.259
Biomass                          12
  WUMS  BIOMS00  45 000000 00              B1-: 0.6 0.02  0.08  0.57    12.   0.
  44.80  5.36  5.36       52.        40.        92.     0.42     0.32     0.74
   0.004    0.003    0.007       0.030       0.000         0.000         0.000
Geothermal                       13
Landfill Gas                     14
  WUMS  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    14.   0.
  78.60 10.48 10.48       63.        48.       110.     0.85     0.65     1.51
   0.105    0.080    0.185       0.000       0.000         0.000         0.000
  WUMS  LG   0     (a)                     WASTE    0.25  0.00  0.00    30. 176.
  78.60 10.48 10.48      132.        95.       226.     1.32     0.95     2.26
   0.162    0.117    0.279       0.000       0.000         0.000         0.000
Wind                             15
  WUMS  WIND 00     000000 00              NONE     0.00  0.00 71.00    13.   0.
  26.40  0.00  0.00       20.        11.        32.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                        16
Solar                            17
Non Fossil_Other                 18
Fossil_Other                     19
Pump Storage                     20
Int. Imports                     21
Cgn_Coal                         22
  WUMSWICGCOU1211162050710 01              SB2: 6.5 0.37  1.00  6.48    11.   0.
  11.70  1.54  1.54       45.        36.        80.     0.36     0.29     0.65
   0.066    0.054    0.120       0.323       0.002         0.062         0.017
  WUMSWICGCOU1311162050710 01              SB2: 6.5 0.37  1.00  6.48     4.   0.
  32.00  1.54  1.54       16.        13.        29.     0.15     0.12     0.27
   0.028    0.023    0.051       0.136       0.001         0.026         0.007
Cgn_Gas                          23
Cgn_Oil                          24
Cgn_Other                        25
NonCG IPP_Coal                   26
NonCG IPP_Gas                    27
NonCG IPP_Other                  28
Blr_Coal                         29
Blr_Gas                          30
Blr_Oil                          31
Blr_Other                        32
SteamOnly Cogen                  33
Rep.Coal-CC                      34
Rep.O/G-CC                       35
Rep.Coal-IGCC                    36
Ret.Scrubber                     37
Ret.ExistSCR & Scrub             38
Ret.ExistSNCR & Scrub            39
Ret.SCR                          40
  WUMSWITSCSU1242162020110 01     SCR1     SB2: 6.5 0.05  0.71  6.29   391.   7.
  22.80  2.41  2.41     1623.      1080.      2702.    17.54    11.67    29.20
   0.438    0.292    0.730      10.396       0.092         2.817         0.768
  WUMSWITSCSU1341161010110 01     SCR2     SB2: 6.5 0.05  1.00  6.29   342.   9.
  26.90  2.47  2.47     1419.      1127.      2547.    13.65    10.84    24.50
```

```
   0.341    0.271    0.612      12.248       0.077         2.363         0.645
Ret.ExistScrub & SCR          41
Ret.SNCR                      42
  WUMSWITSGBU1232392020310 01     SNR1     BB2: 4.1 0.31  1.00  0.45   280.   4.
  26.90  2.38  2.38      747.       593.      1340.     8.74     6.94    15.68
   1.332    1.058    2.391       7.838       0.004         1.460         0.398
Ret.ExistScrub & SNCR         43
  WUMSWITCOLS1231391020104 01     HNO1     BD1: 5.1 0.52  0.57  3.24    80.   3.
  43.30  3.86  3.86      219.       169.       389.     2.28     1.76     4.04
   0.593    0.458    1.052       1.153       0.007         0.377         0.103
Ret.SCR+Scrb                  44
  WUMSWITSCSU1242162020110 01     RD01     SB2: 6.5 0.05  0.10  4.21   706.  26.
  28.48  4.58  4.58     2931.      2328.      5260.    32.34    25.69    58.03
   0.809    0.642    1.451       2.901       0.122         5.599         1.527
  WUMSWITSDBU1241162020110 01     RL02     SD2: 6.7 0.05  0.06  2.28   539.  37.
  43.99  3.41  3.41     2237.      1777.      4014.    20.33    16.14    36.47
   0.508    0.404    0.912       1.021       0.042         3.519         0.960
  WUMSWITSCSU1242162020110 01     SCR1LD01 SB2: 6.5 0.05  0.10  4.21    86.  26.
  28.49  4.58  4.58      356.       282.       638.     3.92     3.12     7.04
   0.098    0.078    0.176       0.352       0.015         0.679         0.185
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: MANO     (Emissions By Plant)
--------------------------------------------------
```

NOx	SO2	MER	CO2	Carbon

```
                        Generation                          Trillion
         Emission             Emission    Emission      Emission       Emission
                                                        (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                            (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  MANO  TCOLA0411182020105 01              BG1: 8.0 0.01  0.25  0.80    18.   0.
  23.60  3.91  3.91       75.        59.       134.     0.67     0.53     1.21
   0.004    0.003    0.007       0.151       0.000         0.112         0.031
  MANO  TCOLD0431182050307 01              BG1: 8.0 0.28  0.25  0.24    42.   0.
  23.30  3.85  3.85      174.       138.       313.     1.81     1.44     3.25
   0.253    0.201    0.454       0.407       0.000         0.303         0.083
Scrubbed Coal                  2
  MANO  TOLBS0432191010103 01              BG1: 8.0 0.51  0.25  3.70    86.   0.
  42.70  2.94  2.94      357.       283.       640.     3.98     3.16     7.15
   1.016    0.807    1.822       0.893       0.013         0.666         0.182
  MANO  TOLBS0432192010203 01              BG1: 8.0 0.47  0.25  4.66    88.   0.
  42.70  2.94  2.94      365.       290.       655.     4.08     3.24     7.33
   0.953    0.757    1.711       0.916       0.017         0.682         0.186
  MANOILTSGBS0412191020703 01              BG1: 8.0 0.97  5.04  4.66    22.   0.
  43.00  2.94  2.94       91.        73.       164.     1.08     0.86     1.93
   0.522    0.415    0.937       4.871       0.005         0.180         0.049
Unscrubbed Coal_NOx            3
  MANO  TSCSO0441182010102 01              SB2: 6.5 0.30  0.68  6.29   292.   0.
  32.30  1.54  1.54     1212.       806.      2018.    11.83     7.87    19.71
   1.745    1.161    2.907       6.700       0.062         1.901         0.519
Unscrubbed Coal                4
  MANO  TCOLU0442192020110 01              BE1: 6.1 0.22  2.20  3.89   102.   0.
  32.00  1.54  1.54      190.       151.       340.     2.14     1.70     3.84
   0.234    0.186    0.420       4.223       0.007         0.357         0.097
  MANOMOTCOLU0511282050710 01              SD2: 6.7 0.48  1.40  6.70    17.   0.
  32.00  1.54  1.54       71.        56.       127.     0.73     0.58     1.32
   0.175    0.139    0.315       0.922       0.004         0.127         0.035
  MANOMOTOLBU0532281010110 01              BB2: 4.1 0.62  1.00  2.62    49.   0.
  32.00  1.54  1.54      170.       104.       274.     1.86     1.14     3.00
   0.575    0.350    0.926       1.500       0.004         0.279         0.076
  MANOMOTSABU0541252020110 01              SB2: 6.5 0.22  1.00  6.29  1158.   0.
  26.40  1.54  1.54     4026.      2453.      6479.    41.03    25.01    66.04
   4.472    2.726    7.198      33.018       0.208         6.371         1.738
  MANO  TSASU0441202020110 01              SB2: 6.5 0.29  0.68  6.29   169.   0.
  32.00  1.54  1.54      588.       358.       946.     6.16     3.75     9.91
   0.886    0.540    1.427       3.368       0.031         0.956         0.261
  MANO  TSBSU0432172010110 01              SB1: 4.5 0.37  0.69  4.41   100.   0.
  32.00  1.54  1.54      348.       212.       560.     4.00     2.44     6.43
   0.742    0.452    1.194       2.213       0.014         0.621         0.169
  MANO  TSBSU0441172020110 01              SB1: 4.5 0.31  0.72  4.41  2672.   0.
  32.00  1.54  1.54    11089.      7378.     18467.   107.18    71.30   178.48
  16.720   11.123   27.843      64.521       0.394        17.220         4.696
  MANO  TSBSU0441172020210 01              SB1: 4.5 0.30  0.69  4.28   579.   0.
  32.00  1.54  1.54     1255.       669.      1924.    12.07     6.44    18.50
   1.828    0.975    2.803       6.411       0.040         1.785         0.487
  MANO  TSBSU0441172020210 01              SB2: 6.5 0.30  0.69  6.09   579.   0.
  32.00  1.54  1.54     1148.       929.      2078.    11.05     8.94    19.98
   1.673    1.354    3.028       6.925       0.061         1.928         0.526
  MANO  TSCSU0441202020110 01              SB2: 6.5 0.27  0.68  6.29   676.   0.
  32.00  1.54  1.54     2350.      1432.      3782.    24.07    14.67    38.75
   3.214    1.959    5.173      13.174       0.122         3.738         1.020
  MANO  TSCSU0442202020110 01              SB2: 6.5 0.27  0.68  6.29   169.   0.
  32.00  1.54  1.54      588.       358.       946.     6.25     3.81    10.06
   0.844    0.514    1.359       3.422       0.032         0.971         0.265
  MANOMOTSDBU0541252020110 01              BB2: 4.1 0.20  1.00  2.62  2300.   0.
```

```
  26.40  1.54  1.54     9545.      6350.     15896.    98.30    65.40   163.69
  10.026    6.670   16.697      81.847       0.215        15.244         4.157
  MANO  TSESU0441172020310 01              SB2: 6.5 0.32  0.68  1.75   187.   0.
  32.00  1.54  1.54      776.       616.      1392.     7.32     5.81    13.14
   1.175    0.933    2.108       4.440       0.011         1.267         0.346
  MANOMOTSGBU0511271040310 01              BB2: 4.1 0.52  1.00  0.45    14.   0.
  32.00  1.54  1.54       58.        46.       104.     0.58     0.46     1.05
   0.153    0.121    0.274       0.523       0.000         0.097         0.027
  MANOMOTSGBU0511272020710 01              BB2: 4.1 0.27  1.00  4.10     2.   0.
  32.00  1.54  1.54        8.         7.        15.     0.08     0.07     0.15
   0.011    0.009    0.020       0.075       0.000         0.014         0.004
  MANOMOTSGBU0531272040310 01              BB2: 4.1 0.49  1.00  0.45    57.   0.
  32.00  1.54  1.54      237.       157.       394.     2.38     1.58     3.96
   0.581    0.387    0.968       1.979       0.001         0.368         0.100
  MANO  TSJBU0432252020210 01              BB2: 4.1 0.38  1.00  3.69    96.   0.
  32.00  1.54  1.54      334.       203.       537.     3.58     2.18     5.76
   0.671    0.409    1.079       2.878       0.011         0.536         0.146
  MANO  TSJBU0441252020110 01              BB2: 4.1 0.35  1.00  2.62   372.   0.
  32.00  1.54  1.54     1544.      1027.      2571.    15.41    10.25    25.66
   2.735    1.820    4.555      12.832       0.034         2.390         0.652
  MANO  TSJBU0441252020210 01              BB2: 4.1 0.30  1.00  3.69   428.   0.
  22.40  1.54  1.54     1488.      1046.      2533.    15.69    11.02    26.71
   2.353    1.654    4.007      13.356       0.049         2.488         0.678
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  MANO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1072.   0.
 184.60  1.32  1.32     4576.      3932.      8508.    45.89    39.44    85.33
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1182.   0.
  91.60  0.51  0.51     5678.      4336.     10014.    58.45    44.64   103.09
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1175.   0.
  91.60  0.51  0.51     5619.      4310.      9929.    57.84    44.37   102.22
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1255.   0.
 138.40  0.50  0.50     6027.      4240.     10267.    62.68    44.09   106.77
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1222.   0.
  88.40  0.50  0.50     5908.      4231.     10139.    60.21    43.12   103.33
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1128.   0.
 162.50  0.78  0.78     5556.      4088.      9644.    58.81    43.27   102.08
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1131.   0.
 162.50  0.78  0.78     5173.      4145.      9318.    55.44    44.41    99.85
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1154.   0.
 137.60  0.57  0.57     5407.      3869.      9276.    56.56    40.47    97.03
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   850.   0.
 196.50  0.86  0.86     4111.      2959.      7070.    45.79    32.96    78.75
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   855.   0.
 188.00  0.94  0.94     3959.      3136.      7096.    43.34    34.33    77.67
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   855.   0.
 188.00  0.94  0.94     3788.      2986.      6774.    41.55    32.74    74.29
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   850.   0.
 196.50  0.86  0.86     4080.      2475.      6555.    45.34    27.51    72.85
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  MANO  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   362.   0.
  15.50  0.00  0.00     1079.       747.      1826.     0.00     0.00     0.00
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  MANO  CC   0413   000000 00              GAS      0.10  0.00  0.00    20.   0.
  13.90  1.03  1.03        4.        10.        15.     0.05     0.11     0.16
   0.003    0.006    0.008       0.000       0.000         0.009         0.002
  MANO  CC   0422   000000 00              GAS      0.02  0.00  0.00  3078.   0.
  13.90  1.03  1.03     3062.      1585.      4647.    22.97    11.89    34.85
   0.230    0.119    0.349       0.000       0.000         1.850         0.504
  MANOMOCC   0522   000000 00              GAS      0.02  0.00  0.00   260.   0.
  13.90  1.03  1.03      175.       134.       309.     1.31     1.00     2.31
   0.013    0.010    0.023       0.000       0.000         0.123         0.034
IGCC                          10
Turbine                       11
  MANO  CT   0411   000000 00              GAS      0.10  0.00  0.00     3.   0.
  11.20  1.03  1.03        2.         2.         4.     0.02     0.01     0.03
   0.001    0.001    0.002       0.000       0.000         0.002         0.000
  MANO  CT   0412   000000 00              GAS      0.09  0.00  0.00   191.   0.
   3.50  1.03  1.03       44.        99.       143.     0.47     1.05     1.52
   0.022    0.049    0.072       0.000       0.000         0.081         0.022
  MANO  CT   0422   000000 00              GAS      0.08  0.00  0.00  9496.   0.
   2.90  1.03  1.03      231.      2150.      2381.     2.52    23.49    26.01
   0.103    0.963    1.066       0.000       0.000         1.380         0.376
  MANOMOCT   0512   000000 00              GAS      0.10  0.00  0.00    37.   0.
   9.00  1.03  1.03        9.        19.        28.     0.09     0.20     0.29
   0.004    0.010    0.014       0.000       0.000         0.015         0.004
Biomass                       12
  MANO  BIOMS00  45 000000 00              B1-: 0.6 0.02  0.08  0.57     1.   0.
  44.80  5.36  5.36        4.         3.         8.     0.03     0.03     0.06
   0.000    0.000    0.001       0.002       0.000         0.000         0.000
Geothermal                    13
Landfill Gas                  14
  MANO  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    38.   0.
  78.60 10.48 10.48      170.       130.       300.     2.32     1.77     4.09
   0.285    0.218    0.503       0.000       0.000         0.000         0.000
Wind                          15
  MANO  WIND 00     000000 00              NONE     0.00  0.00 71.00    52.   0.
  26.40  0.00  0.00       88.        49.       137.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
  MANO  OTHER00     000000 00              NONE     0.00  0.00  0.00    21.   0.
 103.60  0.00  0.00       93.        73.       166.     1.02     0.80     1.82
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                  19
  MANO  WASTE041    000000 00              WASTE    0.42  0.00  0.00     2.   0.
 103.60  0.00  0.00        9.         7.        16.     0.10     0.08     0.17
   0.020    0.016    0.036       0.000       0.000         0.000         0.000
Pump Storage                  20
  MANO  PUMPS00     000000 00              NONE     0.00  0.00 71.00   350.   0.
   6.50  0.00  0.00      197.       142.       339.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                  21
Cgn_Coal                      22
Cgn_Gas                       23
  MANO  CGCT 0412   000000 00              GAS      0.10  0.00  0.00     8.   0.
   2.80  1.03  1.03        2.         4.         6.     0.02     0.04     0.06
   0.001    0.002    0.003       0.000       0.000         0.003         0.001
  MANO  CGCC 0412   000000 00              GAS      0.02  0.00  0.00     7.   0.
  13.90  1.03  1.03       14.         4.        18.     0.11     0.03     0.13
   0.001    0.000    0.001       0.000       0.000         0.007         0.002
  MANO  CGCC 0413   000000 00              GAS      0.10  0.00  0.00     1.   0.
  19.90  1.03  1.03        1.         1.         1.     0.01     0.00     0.01
   0.000    0.000    0.001       0.000       0.000         0.001         0.000
  MANO  CGCC 0422   000000 00              GAS      0.02  0.00  0.00    40.   0.
```

```
  13.90  1.03  1.03       27.        21.        47.     0.20     0.15     0.36
   0.002    0.002    0.004       0.000       0.000         0.019         0.005
Cgn_Oil                       24
Cgn_Other                     25
NonCG IPP_Coal                26
NonCG IPP_Gas                 27
NonCG IPP_Other               28
Blr_Coal                      29
Blr_Gas                       30
Blr_Oil                       31
Blr_Other                     32
SteamOnly Cogen               33
Rep.Coal-CC                   34
Rep.O/G-CC                    35
Rep.Coal-IGCC                 36
Ret.Scrubber                  37
  MANO  TSXBU0441192020110 01     LO01     BG1: 8.0 0.29  0.25  2.73   227.  30.
  38.09  2.93  2.93      943.       749.      1692.     9.34     7.42    16.75
   1.368    1.087    2.455       2.094       0.023         1.560         0.426
  MANO  TSXBU0441192020110 01     ML02     BF1: 6.8 0.29  0.12  2.32   431.  28.
  38.19  2.52  2.52     1787.      1420.      3207.    17.70    14.06    31.76
   2.593    2.060    4.653       1.906       0.037         2.958         0.807
Ret.ExistSCR & Scrub          38
  MANO  TSEBC0441181010101 01     LO01     BG1: 8.0 0.07  0.25  0.80   542.  23.
  35.68  3.95  3.95     2251.      1788.      4039.    23.53    18.69    42.22
   0.859    0.682    1.541       5.277       0.017         3.931         1.072
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
  MANOILTSBBU0441181010110 01     SCR2     BB2: 4.1 0.06  1.00  2.62   298.   8.
  28.90  2.44  2.44     1237.       823.      2060.    12.22     8.13    20.35
   0.379    0.252    0.631      10.174       0.027         1.895         0.517
  MANO  TSESU0441172010110 01     SCR1     SB1: 4.5 0.05  0.76  4.41   303.   9.
  32.50  2.49  2.49     1258.       966.      2224.    11.72     9.01    20.73
   0.293    0.225    0.518       7.868       0.046         2.000         0.546
  MANOMOTSFBU0542251010110 01     SCR2     BB2: 4.1 0.08  1.00  2.62   952.   8.
  29.60  2.44  2.44     3951.      2629.      6580.    42.72    28.42    71.14
   1.645    1.094    2.739      35.569       0.093         6.625         1.807
Ret.ExistScrub & SCR          41
  MANO  TSXBS0441191020103 01     SCR2     BE1: 6.1 0.06  0.37  0.61   366.   8.
  43.20  3.86  3.86     1519.      1206.      2725.    15.22    12.09    27.30
   0.479    0.381    0.860       5.046       0.008         2.543         0.693
  MANO  TSXBS0441192020103 01     SCR1     BG1: 8.0 0.05  0.25  0.80   190.  10.
  41.20  3.95  3.95      789.       626.      1415.     8.32     6.61    14.93
   0.208    0.165    0.373       1.867       0.006         1.391         0.379
  MANO  TSYBS0441191010103 01     SCR2     BE1: 6.1 0.06  0.44  0.61   170.  11.
  41.20  3.96  3.96      706.       560.      1266.     7.41     5.88    13.29
   0.215    0.171    0.385       2.924       0.004         1.238         0.338
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  MANO  TSCSU0441182010110 01     RL01     BF1: 6.8 0.05  0.12  0.68   978.  35.
  39.70  3.53  3.53     4059.      3224.      7283.    42.26    33.56    75.82
   1.056    0.839    1.896       4.549       0.026         7.061         1.926
  MANO  TSCSU0442182010110 01     RO01     BG1: 8.0 0.05  0.25  0.80   685.  39.
  37.47  3.98  3.98     2844.      2259.      5103.    31.71    25.18    56.89
   0.793    0.630    1.422       7.112       0.023         5.298         1.445
  MANOILTSDBU0441191020110 01     SL02     BE1: 6.1 0.06  0.09  0.61   353.  35.
  37.37  3.44  3.44     1467.      1165.      2632.    14.45    11.47    25.92
   0.455    0.361    0.816       1.140       0.008         2.414         0.658
  MANOILTSDBU0441192020110 01     RL01     BE1: 6.1 0.05  0.09  0.61   257.  34.
  37.77  3.50  3.50     1065.       845.      1910.    10.84     8.61    19.45
   0.271    0.215    0.486       0.856       0.006         1.811         0.494
  MANO  TSEBU0442181010110 01     SO01     BG1: 8.0 0.07  0.25  0.80   542.  31.
  41.29  3.90  3.90     2251.      1788.      4039.    24.50    19.46    43.95
   0.894    0.710    1.604       5.494       0.018         4.093         1.116
```

```
  MANO  TSKBU0441182020110 01     RO01     BG1: 8.0 0.05  0.25  0.80   583.  29.
  35.17  3.75  3.75     2418.      1920.      4338.    22.79    18.10    40.90
   0.570    0.453    1.022       5.112       0.016         3.809         1.039
  MANO  TSABU0441182020110 01     LO01SCR1 BG1: 8.0 0.05  0.25  0.80   543.  30.
  31.28  3.77  3.77     2255.      1791.      4046.    21.58    17.14    38.72
   0.539    0.428    0.968       4.840       0.016         3.605         0.983
  MANOILTSBBU0441181010110 01     SCR2ML02 BE1: 6.1 0.06  0.09  0.61     2.  33.
  38.62  3.43  3.43       10.         8.        18.     0.10     0.08     0.18
   0.003    0.002    0.006       0.008       0.000         0.017         0.005
  MANOILTSBBU0441181010110 01     ML02SCR2 BE1: 6.1 0.06  0.09  0.61   587.  33.
  38.61  3.43  3.43     2436.      1934.      4370.    24.56    19.51    44.07
   0.761    0.605    1.366       1.939       0.013         4.104         1.119
  MANOILTSHBU0441192020110 01     LO01SCR1 BG1: 8.0 0.05  0.25  0.80   421.  48.
  45.59  3.88  3.88     1747.      1388.      3135.    16.60    13.18    29.78
   0.415    0.330    0.744       3.722       0.012         2.773         0.756
  MANO  TSKBU0441181010110 01     LO01SCR2 BG1: 8.0 0.08  0.25  0.80  1132.  30.
  35.37  3.85  3.85     4697.      3730.      8427.    48.51    38.53    87.05
   1.989    1.580    3.569      10.881       0.035         8.106         2.211
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: MAPP     (Emissions By Plant)
--------------------------------------------------

            NOx                  SO2         MER           CO2          Carbon

                       Generation                    Trillion
```

```
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  MAPP  TCOLS1111252020203 01              BE1: 6.1 0.46  0.52  3.53    76.   0.
  43.00  2.94  2.94      315.       251.       566.     3.28     2.61     5.89
   0.754    0.599    1.354       1.534       0.010         0.548         0.149
  MAPP  TSWLS0732312030103 02              LF2: 9.8 0.35  0.60  6.07    74.   0.
  43.00  2.94  2.94      264.       204.       468.     3.51     2.72     6.23
   0.611    0.473    1.084       1.870       0.019         0.609         0.166
  MAPP  TSEBS1142252020103 01              BE1: 6.1 0.32  0.67  2.07   217.   0.
  43.00  2.94  2.94      754.       599.      1354.     8.05     6.40    14.45
   1.304    1.036    2.341       4.815       0.015         1.345         0.367
  MAPP  TSISS1141262020703 01              SB1: 4.5 0.30  0.46  3.18   350.   0.
  42.70  2.94  2.94     1453.       966.      2419.    15.38    10.23    25.60
   2.306    1.534    3.841       5.851       0.041         2.470         0.674
  MAPP  TSXBS1142272020103 01              BE1: 6.1 0.30  0.13  2.07   161.   0.
  40.60  2.94  2.94      668.       531.      1199.     7.20     5.72    12.91
   1.080    0.857    1.937       0.866       0.013         1.202         0.328
  MAPPNDTSXLS0732312020304 02              LF2: 9.8 0.40  0.58  9.79    69.   0.
  40.60  2.94  2.94      286.       227.       514.     3.11     2.47     5.57
   0.621    0.494    1.115       1.617       0.027         0.545         0.149
  MAPPNDTSXLS0741311020103 02              LF2: 9.8 0.40  1.15  5.48   604.   0.
  40.60  2.94  2.94     2507.      1886.      4392.    26.07    19.61    45.68
   5.214    3.922    9.136      26.229       0.125         4.463         1.217
  MAPPNDTSXLS0742311010103 02              LF2: 9.8 0.86  0.52  5.68   420.   0.
  42.70  2.94  2.94     1743.      1384.      3127.    20.22    16.06    36.28
   8.694    6.905   15.600       9.521       0.103         3.545         0.967
  MAPPNDTSXLS0742312010304 02              LF2: 9.8 0.86  0.70  8.91   421.   0.
  40.60  2.94  2.94     1747.      1162.      2910.    19.86    13.21    33.08
   8.541    5.682   14.223      11.607       0.147         3.232         0.881
  MAPPNDTSXLS0742312020304 02              LF2: 9.8 0.32  0.28  9.79   900.   0.
  40.60  2.94  2.94     3735.      2967.      6702.    40.90    32.48    73.38
   6.502    5.164   11.667      10.427       0.359         7.169         1.955
  MAPP  TSYSS1142262020203 01              SD1: 4.4 0.29  0.10  3.52   535.   0.
  40.60  2.94  2.94     2220.      1763.      3984.    24.03    19.09    43.12
   3.461    2.749    6.209       2.234       0.076         4.160         1.135
  MAPP  TSYSS1142262020703 01              SE1: 5.5 0.24  0.17  3.87  1424.   0.
  42.70  2.94  2.94        0.      2427.      2427.     0.00    25.87    25.87
   0.000    3.130    3.130       2.228       0.050         2.496         0.681
  MAPP  TSYSS1142262020703 01              SD1: 4.4 0.24  0.11  3.08  1424.   0.
  42.70  2.94  2.94     5910.      2266.      8176.    62.99    24.16    87.15
   7.622    2.923   10.545       5.002       0.134         8.408         2.293
  MAPPWYTSZLS0841322020103 01              SE1: 5.5 0.35  0.05  4.65   550.   0.
  40.60  2.94  2.94     2283.      1813.      4095.    23.92    19.00    42.92
   4.187    3.325    7.512       1.037       0.100         4.141         1.129
  MAPP  TSASS0732312020703 01              SB2: 6.5 0.40  0.24  4.54    44.   0.
  43.00  2.94  2.94      183.       145.       328.     2.36     1.87     4.23
   0.472    0.375    0.847       0.512       0.010         0.408         0.111
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  MAPP  TCOLU0711312050710 01              SB2: 6.5 0.47  1.00  6.48    20.   0.
  25.80  1.54  1.54       83.        66.       149.     0.86     0.69     1.55
   0.203    0.161    0.364       0.774       0.005         0.149         0.041
  MAPP  TCOLU0731311040110 01              BB2: 4.1 0.60  1.00  2.67    28.   0.
  32.00  1.54  1.54      116.        92.       208.     1.21     0.96     2.17
   0.363    0.288    0.651       1.084       0.003         0.202         0.055
  MAPP  TCOLU1111261040110 01              BB2: 4.1 0.60  1.00  2.67    14.   0.
  17.40  1.54  1.54       58.        46.       104.     0.60     0.48     1.08
   0.181    0.144    0.325       0.542       0.001         0.101         0.028
```

MAPP TCOLU1111271040210 01 BG1: 8.0 0.60 5.00 8.04 19. 0.
32.00 1.54 1.54 79. 63. 141. 0.82 0.65 1.47
0.246 0.195 0.441 3.678 0.006 0.137 0.037
MAPP TCOLU1111261040310 01 BB2: 4.1 0.60 0.72 0.45 8. 0.
32.00 1.54 1.54 33. 26. 60. 0.35 0.27 0.62
0.104 0.082 0.186 0.223 0.000 0.058 0.016
MAPP TCOLU1111252020110 01 BG1: 8.0 0.46 5.00 5.15 31. 0.
32.00 1.54 1.54 129. 102. 231. 1.34 1.06 2.40
0.308 0.244 0.552 6.002 0.006 0.224 0.061
MAPP TCOLU1111262050710 01 BB2: 4.1 0.40 1.00 4.10 103. 0.
32.00 1.54 1.54 427. 340. 767. 4.45 3.53 7.98
0.891 0.708 1.599 3.988 0.016 0.743 0.203
MAPP TCOLU1131261040110 01 BB2: 4.1 0.60 1.00 2.67 37. 0.
17.40 1.54 1.54 129. 78. 207. 1.34 0.82 2.15
0.401 0.245 0.646 1.077 0.003 0.200 0.055
MAPP TCOLU1131262020110 01 BB2: 4.1 0.46 1.00 2.62 47. 0.
32.00 1.54 1.54 163. 100. 263. 1.70 1.04 2.73
0.391 0.238 0.629 1.367 0.004 0.255 0.069
MAPP TCOLU1131272020110 01 BB2: 4.1 0.46 1.00 2.62 62. 0.
32.00 1.54 1.54 216. 131. 347. 2.24 1.37 3.61
0.516 0.314 0.830 1.804 0.005 0.336 0.092
MAPP TCOLU1131252020210 01 BB2: 4.1 0.46 1.00 3.69 73. 0.
32.00 1.54 1.54 254. 155. 408. 2.64 1.61 4.25
0.607 0.370 0.977 2.124 0.008 0.396 0.108
MAPP TCOLU1131262020310 01 BB2: 4.1 0.46 1.00 0.45 150. 0.
32.00 1.54 1.54 521. 414. 936. 5.42 4.31 9.73
1.247 0.991 2.238 4.865 0.002 0.906 0.247
MAPPWITCOLU1311161010710 01 SB2: 6.5 0.86 1.00 6.48 24. 0.
32.00 1.54 1.54 100. 79. 179. 1.04 0.82 1.86
0.445 0.354 0.799 0.929 0.006 0.179 0.049
MAPPWITCOLU1311162020110 01 SD2: 6.7 0.46 1.40 6.50 63. 0.
32.00 1.54 1.54 261. 208. 469. 2.72 2.16 4.88
0.625 0.497 1.122 3.415 0.016 0.471 0.128
MAPPWITCOLU1311162040210 01 SB2: 6.5 0.37 1.00 6.48 49. 0.
32.00 1.54 1.54 203. 162. 365. 2.11 1.68 3.79
0.393 0.312 0.706 1.897 0.012 0.366 0.100
MAPP TOLBU1141252020110 01 BB2: 4.1 0.34 1.00 2.62 130. 0.
32.00 1.54 1.54 452. 307. 759. 4.74 3.23 7.97
0.809 0.550 1.359 3.985 0.010 0.742 0.202
MAPPMOTOLBU0512282020110 01 SD2: 6.7 0.42 1.40 6.50 21. 0.
32.00 1.54 1.54 87. 69. 156. 0.96 0.76 1.72
0.203 0.161 0.364 1.206 0.006 0.166 0.045
MAPPMOTOLBU0532281010110 01 BB2: 4.1 0.54 1.00 2.62 97. 0.
32.00 1.54 1.54 337. 206. 543. 3.76 2.29 6.05
1.024 0.624 1.648 3.023 0.008 0.563 0.154
MAPP TSABU1141282010210 01 BB2: 4.1 0.44 1.00 3.69 135. 0.
32.00 1.54 1.54 469. 373. 842. 4.94 3.93 8.87
1.098 0.872 1.969 4.435 0.016 0.826 0.225
MAPP TSABU1142282020110 01 BB2: 4.1 0.32 1.00 2.62 371. 0.
26.40 1.54 1.54 1540. 1024. 2564. 16.41 10.92 27.32
2.609 1.736 4.344 13.661 0.036 2.544 0.694
MAPPWITSASU1331162020110 01 SB2: 6.5 0.41 1.00 6.29 87. 0.
32.00 1.54 1.54 302. 240. 543. 3.13 2.49 5.62
0.647 0.514 1.161 2.812 0.018 0.543 0.148
MAPPWITSASU1332162020110 01 SB2: 6.5 0.41 1.00 6.29 57. 0.
32.00 1.54 1.54 198. 121. 319. 2.17 1.32 3.50
0.448 0.273 0.722 1.748 0.011 0.337 0.092
MAPP TSBBU1112271020710 01 BG1: 8.0 0.95 5.00 8.04 23. 0.
32.00 1.54 1.54 95. 76. 171. 1.15 0.92 2.07
0.546 0.434 0.980 5.181 0.008 0.193 0.053
MAPP TSBBU1112272040210 01 BB2: 4.1 0.47 1.00 4.10 36. 0.
32.00 1.54 1.54 149. 119. 268. 1.94 1.54 3.48
0.456 0.363 0.819 1.742 0.007 0.325 0.089
MAPP TSBBU1131262020110 01 BB2: 4.1 0.42 1.00 2.62 29. 0.
26.40 1.54 1.54 120. 80. 200. 1.20 0.80 2.00

0.250 0.167 0.417 0.998 0.003 0.186 0.051
MAPP TSBBU1131262020210 01 BB2: 4.1 0.41 1.00 3.69 60. 0.
26.40 1.54 1.54 209. 127. 336. 2.19 1.33 3.52
0.446 0.272 0.717 1.762 0.007 0.328 0.090
MAPPNETSBBU1432282020210 01 BB2: 4.1 0.22 0.75 3.69 85. 0.
26.40 1.54 1.54 353. 280. 633. 3.96 3.14 7.10
0.438 0.348 0.785 2.657 0.013 0.662 0.180
MAPPNETSBBU1441282010310 01 BB2: 4.1 0.85 0.67 0.45 120. 0.
32.00 1.54 1.54 498. 396. 894. 5.20 4.13 9.33
2.205 1.751 3.955 3.102 0.002 0.869 0.237
MAPPNETSBBU1442282010310 01 BB2: 4.1 0.88 0.67 0.45 105. 0.
26.40 1.54 1.54 436. 346. 782. 4.90 3.89 8.79
2.153 1.710 3.863 2.940 0.002 0.819 0.223
MAPPNETSBSU1432282020110 01 SB2: 6.5 0.40 1.00 6.29 76. 0.
32.00 1.54 1.54 315. 210. 525. 3.70 2.46 6.17
0.741 0.493 1.233 3.083 0.019 0.595 0.162
MAPPNETSBSU1432282020210 01 SB2: 6.5 0.38 0.70 6.09 172. 0.
22.40 1.54 1.54 714. 567. 1281. 7.94 6.31 14.25
1.509 1.198 2.707 4.952 0.043 1.375 0.375
MAPPNETSBSU1441282020110 01 SB2: 6.5 0.46 1.00 6.29 585. 0.
22.40 1.54 1.54 2428. 1928. 4356. 25.11 19.95 45.06
5.776 4.588 10.364 22.530 0.142 4.347 1.186
MAPPNETSBSU1441282020210 01 SB2: 6.5 0.46 0.65 6.09 700. 0.
22.40 1.54 1.54 2905. 2307. 5212. 27.57 21.90 49.47
6.341 5.036 11.377 16.151 0.151 4.772 1.302
MAPPNETSBSU1442282020110 01 SB2: 6.5 0.42 1.00 6.29 569. 0.
29.90 1.54 1.54 2361. 1876. 4237. 26.05 20.69 46.75
5.510 4.376 9.887 23.373 0.147 4.510 1.230
MAPPNETSBSU1442282020510 01 SB2: 6.5 0.46 0.66 1.75 665. 0.
22.40 1.54 1.54 2760. 2192. 4952. 29.81 23.68 53.48
6.856 5.445 12.301 17.543 0.047 5.160 1.407
MAPP TSCBU1131272010110 01 BB2: 4.1 0.39 1.00 2.62 80. 0.
32.00 1.54 1.54 332. 221. 553. 3.33 2.21 5.54
0.644 0.428 1.072 2.770 0.007 0.516 0.141
MAPP TSCBU1131252020110 01 BB2: 4.1 0.44 1.00 2.62 34. 0.
32.00 1.54 1.54 118. 72. 190. 1.23 0.75 1.98
0.272 0.166 0.438 0.989 0.003 0.184 0.050
MAPP TSCSU1141252020210 01 SB2: 6.5 0.30 0.72 6.09 644. 0.
22.40 1.54 1.54 2239. 1778. 4017. 23.39 18.58 41.96
3.450 2.740 6.190 15.149 0.128 4.049 1.104
MAPP TSCSU1142252020210 01 SB2: 6.5 0.30 0.71 6.09 260. 0.
26.40 1.54 1.54 904. 551. 1455. 10.51 6.41 16.92
1.577 0.961 2.537 6.039 0.052 1.632 0.445
MAPPWITSCSU1342162020210 01 SB2: 6.5 0.31 0.66 6.09 377. 0.
22.40 1.54 1.54 1565. 1041. 2606. 17.36 11.55 28.91
2.647 1.761 4.409 9.467 0.088 2.789 0.761
MAPP TSDSU1132252020110 01 SB2: 6.5 0.35 0.43 6.29 30. 0.
26.40 1.54 1.54 104. 64. 168. 1.22 0.74 1.96
0.213 0.130 0.343 0.423 0.006 0.189 0.051
MAPP TSDSU1132252020210 01 SB2: 6.5 0.33 0.66 6.09 88. 0.
32.00 1.54 1.54 306. 186. 492. 3.40 2.07 5.47
0.569 0.347 0.915 1.809 0.017 0.527 0.144
MAPP TSEBU1141252020110 01 BB2: 4.1 0.30 1.00 2.62 211. 0.
26.40 1.54 1.54 876. 583. 1458. 9.08 6.04 15.11
1.352 0.900 2.252 7.557 0.020 1.408 0.384
MAPP TSGBU1132271010110 01 BB2: 4.1 0.53 1.00 2.62 76. 0.
26.40 1.54 1.54 264. 161. 425. 2.87 1.75 4.62
0.753 0.459 1.213 2.310 0.006 0.430 0.117
MAPP TSGBU1132272020110 01 BB2: 4.1 0.45 1.00 2.62 39. 0.
32.00 1.54 1.54 136. 83. 218. 1.52 0.92 2.44
0.341 0.208 0.549 1.220 0.003 0.227 0.062
MAPP TSGBU1132272020210 01 BB2: 4.1 0.43 1.00 3.69 78. 0.
29.40 1.54 1.54 271. 165. 436. 3.05 1.86 4.90
0.652 0.397 1.049 2.451 0.009 0.456 0.124
MAPP TSGBU1141272020210 01 BB2: 4.1 0.32 1.00 3.69 142. 0.

```
  32.00  1.54  1.54      589.       392.       981.     6.01     4.00    10.01
   0.968    0.644    1.611       5.004       0.018         0.932         0.254
  MAPP  TSISU1132262020110 01              SB1: 4.5 0.34  0.53  4.41   242.   0.
  32.00  1.54  1.54      841.       513.      1354.     9.79     5.96    15.75
   1.664    1.014    2.678       4.150       0.035         1.520         0.414
  MAPP  TSISU1132262020310 01              SB1: 4.5 0.30  1.00  1.23   138.   0.
  32.00  1.54  1.54      480.       292.       772.     5.31     3.24     8.55
   0.796    0.485    1.282       4.273       0.005         0.824         0.225
  MAPP  TSISU1142262020110 01              SB1: 4.5 0.38  0.58  4.41   454.   0.
  32.00  1.54  1.54     1578.       962.      2540.    17.43    10.62    28.05
   3.337    2.034    5.371       8.091       0.062         2.706         0.738
  MAPPWITSISU1341392020110 01              SB1: 4.5 0.31  1.00  4.41   377.   0.
  26.40  1.54  1.54     1565.      1041.      2606.    14.21     9.45    23.66
   2.209    1.470    3.679      11.829       0.052         2.283         0.623
  MAPP  TSLBU1112261020710 01              BB2: 4.1 0.81  1.00  4.10    23.   0.
  32.00  1.54  1.54       95.        76.       171.     1.12     0.89     2.00
   0.454    0.361    0.815       1.002       0.004         0.187         0.051
  MAPPNETSLBU1412281020310 01              BB2: 4.1 0.71  0.62  0.45    35.   0.
  32.00  1.54  1.54      145.       115.       261.     1.92     1.52     3.44
   0.676    0.537    1.212       1.061       0.001         0.320         0.087
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   561.   0.
 176.10  0.82  0.82     2777.      1704.      4481.    30.24    18.55    48.79
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   529.   0.
  95.60  0.59  0.59     2691.      1573.      4265.    28.99    16.95    45.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   597.   0.
 109.60  0.70  0.70     2285.      2190.      4475.    23.89    22.89    46.78
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   530.   0.
 145.60  0.59  0.59     2522.      1584.      4106.    27.10    17.02    44.12
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   571.   0.
 232.50  1.20  1.20     2305.      2095.      4400.    24.53    22.29    46.83
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   834.   0.
 185.20  0.93  0.93     2619.      2833.      5451.    28.08    30.38    58.47
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  MAPP  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  3204.   0.
  15.40  0.00  0.00     5412.      4577.      9989.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  MAPP  CC   0422   000000 00              GAS      0.02  0.00  0.00   537.   0.
  13.90  1.03  1.03      995.       831.      1825.     7.46     6.23    13.69
   0.075    0.062    0.137       0.000       0.000         0.727         0.198
  MAPP  CC   1113   000000 00              GAS      0.16  0.00  0.00    43.   0.
  19.70  1.03  1.03       10.        22.        32.     0.11     0.24     0.35
   0.008    0.019    0.028       0.000       0.000         0.019         0.005
  MAPP  CC   1122   000000 00              GAS      0.05  0.00  0.00   451.   0.
  13.90  1.03  1.03      303.       232.       535.     2.38     1.82     4.21
   0.061    0.047    0.107       0.000       0.000         0.223         0.061
  MAPP  CC   1123   000000 00              GAS      0.11  0.00  0.00    89.   0.
  13.90  0.00  1.03        0.        15.        15.     0.00     0.17     0.17
   0.000    0.009    0.009       0.000       0.000         0.009         0.002
  MAPPNECC   1422   000000 00              GAS      0.02  0.00  0.00   118.   0.
  13.90  1.03  1.03      397.       183.       579.     2.97     1.37     4.34
   0.030    0.014    0.043       0.000       0.000         0.231         0.063
IGCC                          10
Turbine                       11
  MAPP  CT   0712   000000 00              GAS      0.08  0.00  0.00     2.   0.
   2.80  1.03  1.03        0.         1.         1.     0.01     0.01     0.02
```

```
   0.000    0.000    0.001       0.000       0.000         0.001         0.000
  MAPP  CT   0722   000000 00              GAS      0.10  0.00  0.00    30.   0.
   7.80  0.00  1.03        0.         5.         5.     0.00     0.06     0.06
   0.000    0.003    0.003       0.000       0.000         0.003         0.001
  MAPP  CT   1111   000000 00              GAS      0.11  0.00  0.00    64.   0.
  10.70  1.03  1.03       44.        33.        78.     0.40     0.30     0.70
   0.022    0.017    0.039       0.000       0.000         0.037         0.010
  MAPP  CT   1112   000000 00              GAS      0.09  0.00  0.00   273.   0.
   3.80  1.03  1.03       63.       141.       204.     0.67     1.51     2.18
   0.031    0.069    0.100       0.000       0.000         0.116         0.032
  MAPP  CT   1113   000000 00              GAS      0.11  0.00  0.00   144.   0.
   9.50  0.00  1.03        0.        25.        25.     0.00     0.33     0.33
   0.000    0.019    0.019       0.000       0.000         0.017         0.005
  MAPP  CT   1122   000000 00              GAS      0.08  0.00  0.00  1513.   0.
   2.80  0.00  1.03        0.       280.       280.     0.00     3.07     3.07
   0.000    0.124    0.124       0.000       0.000         0.163         0.044
  MAPP  CT   1123   000000 00              GAS      0.11  0.00  0.00   934.   0.
   9.90  0.00  1.03        0.       109.       109.     0.00     1.42     1.42
   0.000    0.081    0.081       0.000       0.000         0.075         0.021
  MAPPNECT   1412   000000 00              GAS      0.10  0.00  0.00    49.   0.
  10.00  1.03  1.03       11.        25.        37.     0.12     0.27     0.39
   0.006    0.014    0.020       0.000       0.000         0.020         0.006
  MAPPNECT   1413   000000 00              GAS      0.10  0.00  0.00    21.   0.
  11.20  0.00  1.03        0.         4.         4.     0.00     0.05     0.05
   0.000    0.002    0.002       0.000       0.000         0.003         0.001
  MAPPNECT   1422   000000 00              GAS      0.08  0.00  0.00   629.   0.
   3.20  1.03  1.03      145.       326.       471.     1.61     3.60     5.21
   0.067    0.149    0.216       0.000       0.000         0.276         0.075
  MAPPNECT   1423   000000 00              GAS      0.11  0.00  0.00   496.   0.
  10.50  0.00  1.03        0.        85.        85.     0.00     1.09     1.09
   0.000    0.062    0.062       0.000       0.000         0.058         0.016
  MAPPWICT   1312   000000 00              GAS      0.08  0.00  0.00    25.   0.
   3.60  1.03  1.03        6.        13.        19.     0.06     0.14     0.20
   0.003    0.006    0.008       0.000       0.000         0.010         0.003
  MAPPWICT   1313   000000 00              GAS      0.12  0.00  0.00    13.   0.
   3.80  0.00  1.03        0.         2.         2.     0.00     0.03     0.03
   0.000    0.002    0.002       0.000       0.000         0.002         0.000
  MAPPWICT   1322   000000 00              GAS      0.08  0.00  0.00    82.   0.
   2.80  1.03  1.03        3.        42.        45.     0.03     0.46     0.50
   0.001    0.019    0.020       0.000       0.000         0.026         0.007
Biomass                        12
  MAPP  BIOMS00  46 000000 00              B1-: 0.6 0.02  0.08  0.57   163.   0.
  44.80  5.36  5.36      706.       546.      1252.     5.72     4.42    10.14
   0.057    0.044    0.101       0.405       0.003         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  MAPP  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    11.   0.
  78.60 10.48 10.48       49.        38.        87.     0.67     0.51     1.18
   0.083    0.063    0.146       0.000       0.000         0.000         0.000
Wind                           15
  MAPP  WIND 00     000000 00              NONE     0.00  0.00 71.00   857.   0.
  26.40  0.00  0.00     1443.       809.      2252.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  WIN410     (a)                     NONE     0.00  0.00 71.00    32. 140.
  26.40  0.00  0.00       55.        28.        84.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  MAPP  OTHER00     000000 00              NONE     0.00  0.00 71.00    34.   0.
 103.60  0.00  0.00      150.       118.       268.     1.65     1.30     2.95
   0.000    0.000    0.000       0.000       0.105         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
```

```
  MAPP  MNIMP00     000000 00              NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00        1.         1.         2.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                        22
  MAPP  CGCOU1111262050210 01              BB2: 4.1 0.40  1.00  4.10    11.   0.
  32.00  1.54  1.54       45.        36.        80.     0.40     0.32     0.73
   0.081    0.065    0.146       0.363       0.001         0.068         0.018
  MAPP  CGCOU1111262050710 01              BB2: 4.1 0.40  1.00  4.10     1.   0.
  32.00  1.54  1.54        4.         3.         7.     0.04     0.03     0.07
   0.008    0.007    0.015       0.037       0.000         0.007         0.002
  MAPP  CGSDU1131251020210 01              BB2: 4.1 0.53  0.42  3.69    65.   0.
  22.40  1.54  1.54      263.       212.       475.     2.34     1.89     4.23
   0.617    0.498    1.115       0.882       0.008         0.394         0.107
Cgn_Gas                         23
  MAPP  CGCT 1112   000000 00              GAS      0.09  0.00  0.00    31.   0.
   2.80  1.03  1.03        7.        16.        23.     0.08     0.17     0.25
   0.003    0.007    0.011       0.000       0.000         0.013         0.004
Cgn_Oil                         24
Cgn_Other                       25
  MAPP  CGOTH00     000000 00              NONE     0.00  0.00 71.00     2.   0.
 103.60  0.00  0.00        9.         7.        15.     0.04     0.03     0.06
   0.000    0.000    0.000       0.000       0.002         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
  MAPPSDTSBLU0742261010110 02     ML02     LF2: 9.8 0.86  0.12  5.68   443.  27.
  36.27  2.64  2.64     1836.      1459.      3295.    21.20    16.84    38.04
   9.115    7.240   16.355       2.206       0.108         3.716         1.014
  MAPPNDTSELU0742312010110 02     ML02     LF2: 9.8 0.86  0.12  5.68   676.  29.
  37.37  2.64  2.64     2803.      2227.      5030.    32.17    25.55    57.72
  13.833   10.987   24.820       3.348       0.164         5.639         1.538
  MAPPNDTSELU0742312020110 02     ML01     LF2: 9.8 0.36  0.12  5.48   370.  32.
  44.69  2.62  2.62     1536.      1220.      2756.    17.08    13.56    30.64
   3.048    2.421    5.469       1.777       0.084         2.993         0.816
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
  MAPP  TSABU1141282020110 01     SCR1     BB2: 4.1 0.05  1.00  2.62   924.   8.
  24.10  2.44  2.44     3835.      3046.      6880.    39.22    31.15    70.37
   0.980    0.779    1.759      35.183       0.092         6.553         1.787
  MAPP  TSCSU1141251020210 01     SCR2     SB2: 6.5 0.06  0.73  5.83   714.   7.
  22.80  2.40  2.40     2963.      1971.      4935.    30.95    20.59    51.54
   0.851    0.566    1.417      18.785       0.150         4.972         1.356
  MAPP  TSCSU1141252020110 01     SCR1     SB2: 6.5 0.05  0.68  6.29   637.   7.
  22.80  2.41  2.41     2644.      1759.      4402.    27.76    18.47    46.23
   0.694    0.462    1.156      15.671       0.145         4.460         1.216
  MAPP  TSESU1141261010110 01     SCR2     SB1: 4.5 0.07  1.00  4.41   567.   7.
  26.80  2.42  2.42     2353.      1566.      3919.    22.92    15.25    38.16
   0.779    0.518    1.298      19.082       0.084         3.682         1.004
  MAPP  TSKSU1141261010110 01     SCR2     SB1: 4.5 0.06  1.00  4.41   222.  10.
  32.50  2.53  2.53      921.       613.      1534.     9.49     6.31    15.80
   0.261    0.174    0.435       7.902       0.035         1.525         0.416
Ret.ExistScrub & SCR            41
  MAPP  TSYSS1141262020304 01     SCR1     SD1: 4.4 0.05  0.20  3.30   871.   6.
  35.90  3.78  3.78     3615.      2871.      6486.    35.96    28.56    64.51
   0.899    0.714    1.613       6.593       0.106         6.224         1.698
```

```
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
Ret.ExistScrub+GasR             47
Ret.GasReburn+Scrub             48
Ret.ACI                         49
Ret.ExistScrub&ACI              50
Ret.ExistSCR&ACI                51
Ret.ExistSNCR&ACI               52
Ret.ACI & SCR                   53
Ret.ExistScrub&ACI&SCR          54
Ret.ACI & SNCR                  55
Ret.ExistScrub&ACI&SNCR         56
Ret.ACI & Srub                  57
Ret.ExistSCR&ACI&Scrub          58
Ret.ExistSNCR&ACI&Scrub         59
Ret.ExistSNCR&ExistScrub&ACI    60
Ret.ExistSCR&ExistScrub&ACI     61
Ret.ExistNOx&ExistScrub&ACI     62
Ret.SCR & Scrub & ACI           63
Ret.SNCR & Scrub & ACI          64
Ret.O/G SCR                     65
Ret.O/G SNCR                    66
Ret.Nuclear (age 30+10 yrs)     67
Ret.Nuclear (age 40+20 yrs)     68
Ret. Biomass Cofiring           69
CT Early Retirement             70
CC Early Retirement             71
O/G Early Retirement            72
Coal Early Retirement           73
Nuke Early Retirement           74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: UPNY     (Emissions By Plant)
--------------------------------------------------
```

	NOx			SO2		MER	CO2		Carbon											
			Generation						Trillion											
	Emission			Emission		Emission	Emission		Emission											
							(lb/MBtu)		(lb/TBtu)											
/KWyr	VOM	Mill/KWh	(GWh)						(Btu)											
	(1000 Tons)			(1000 Tons)		(Tons)	(Mil Tonnes)		(Mil Tonnes)											
	Unit					Fuel	NOx		SO2		MERCURY		Cap.		Cap					
.	FO&M	WINT.	SUMM.	WINTER		SUMMER	Total		WINTER		SUMMER		Total							
	WINTER		SUMMER	Total		Total	Total		Total		Total									
Scrubbed Coal_NOx					1															
UPNY	TSYBA0141022020105				01		BE3:18.4	0.04	0.25	1.84	675.	0.								
41.20	3.91	3.91		2801.		2225.	5026.		25.74		20.44		46.18							
0.541		0.429	0.970			5.842	0.043		4.301				1.173							
UPNY	TSXBA0141022020105				01		BE3:18.4	0.04	0.09	1.84	157.	0.								
43.50	3.91	3.91		652.		517.	1169.		6.23		4.95		11.17							
0.131		0.104	0.235			0.492	0.010		1.040				0.284							
Scrubbed Coal					2															

```
Unscrubbed Coal_NOx            3
  UPNY  TCOLN0131022020102 01              BA2: 5.2 0.26  1.10  3.31    47.   0.
  32.20  2.45  2.45      195.       155.       350.     2.03     1.61     3.64
   0.264    0.209    0.473       2.002       0.006         0.339         0.092
  UPNY  TSFBO0141022020102 01              BA2: 5.2 0.21  1.10  3.31   105.   0.
  32.30  1.54  1.54      436.       346.       782.     4.18     3.32     7.50
   0.433    0.344    0.776       4.124       0.012         0.698         0.190
  UPNY  TSFBN0131022020102 01              BA2: 5.2 0.25  1.10  3.31   210.   0.
  32.20  2.45  2.45      872.       692.      1564.     8.71     6.92    15.63
   1.071    0.851    1.922       8.595       0.026         1.455         0.397
Unscrubbed Coal                4
  UPNY  TCOLU0111022050110 01              BD2:12.5 0.35  1.50  8.03   117.   0.
  32.00  1.54  1.54      486.       386.       871.     5.05     4.01     9.06
   0.884    0.702    1.586       6.795       0.036         0.844         0.230
  UPNY  TCOLU0111022020210 01              BE3:18.4 0.46  2.20 16.58    44.   0.
  32.00  1.54  1.54      183.       145.       328.     1.90     1.51     3.41
   0.437    0.347    0.784       3.748       0.028         0.317         0.087
  UPNY  TCOLU0111022050210 01              BD2:12.5 0.35  1.50 12.54    82.   0.
  32.00  1.54  1.54      340.       270.       611.     3.54     2.81     6.35
   0.619    0.492    1.111       4.763       0.040         0.591         0.161
  UPNY  TCOLU0131022020110 01              BA2: 5.2 0.46  1.10  3.31    55.   0.
  32.00  1.54  1.54      228.       181.       410.     2.37     1.89     4.26
   0.546    0.434    0.980       2.343       0.007         0.397         0.108
  UPNY  TSCBU0131022020110 01              BA2: 5.2 0.45  1.10  3.31   362.   0.
  32.00  1.54  1.54     1502.      1193.      2696.    15.62    12.41    28.03
   3.547    2.817    6.364      15.419       0.046         2.611         0.712
  UPNY  TSFBU0131022020210 01              BA2: 5.2 0.35  1.10  4.65   266.   0.
  32.00  1.54  1.54     1104.       877.      1981.    11.24     8.93    20.17
   1.990    1.581    3.571      11.095       0.047         1.879         0.512
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  UPNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   498.   0.
 192.50  0.74  0.74     2299.      1644.      3943.    24.12    17.25    41.37
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  UPNY  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   619.   0.
 206.50  1.07  1.07     2126.      2271.      4396.    22.83    24.39    47.22
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  UPNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1154.   0.
 117.70  0.78  0.78     4861.      4233.      9094.    52.21    45.47    97.67
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  UPNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   840.   0.
 192.60  0.77  0.77     3489.      3081.      6571.    34.77    30.70    65.47
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  UPNY  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  5551.   0.
  15.50  0.00  0.00    15534.     10355.     25889.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  UPNY  CC   0123   000000 00              GAS      0.19  0.00  0.00    73.   0.
  13.90  1.03  1.03       16.         5.        22.     0.18     0.06     0.24
   0.017    0.005    0.022       0.000       0.000         0.013         0.003
IGCC                          10
Turbine                       11
  UPNY  CT   0112   000000 00              GAS      0.08  0.00  0.00     8.   0.
   2.80  1.03  1.03        2.         1.         3.     0.02     0.02     0.04
   0.001    0.001    0.001       0.000       0.000         0.002         0.001
  UPNY  CT   0122   000000 00              GAS      0.08  0.00  0.00    43.   0.
   2.80  1.03  1.03       10.         7.        17.     0.11     0.08     0.19
   0.004    0.003    0.008       0.000       0.000         0.010         0.003
Biomass                       12
  UPNY  BIOMS00  47 000000 00              B1-: 0.6 0.02  0.08  0.57    18.   0.
  44.80  5.36  5.36       78.        60.       138.     0.72     0.56     1.28
   0.007    0.006    0.013       0.051       0.000         0.000         0.000
Geothermal                    13
```

```
Landfill Gas                    14
  UPNY  LFGAS00     000000 00                WASTE    0.25  0.00  0.00     6.   0.
  78.60 10.48 10.48       27.        20.        47.     0.37     0.28     0.65
   0.045    0.034    0.079       0.000       0.000         0.000         0.000
Wind                            15
  UPNY  WIND 00     000000 00                NONE     0.00  0.00 71.00   194.   0.
  26.40  0.00  0.00       87.        49.       136.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
  UPNY  FCELL00     000000 00                GAS      0.40  0.00  0.00     1.   0.
  15.00  2.06  2.06        5.         3.         8.     0.03     0.03     0.06
   0.007    0.005    0.012       0.000       0.000         0.003         0.001
Solar                           17
Non Fossil_Other                18
  UPNY  OTHER00     000000 00                NONE     0.00  0.00 71.00    34.   0.
 103.60  0.00  0.00      150.       118.       268.     1.65     1.30     2.95
   0.000    0.000    0.000       0.000       0.105         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
  UPNY  NYIMP00     000000 00                NONE     0.00  0.00 71.00  3000.   0.
   0.00  0.00  0.00        2.         1.         3.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                        22
  UPNY  CGCOU0131022050710 01                BA2: 5.2 0.35  1.10  5.17    80.   0.
  11.70  1.54  1.54      324.       261.       585.     2.47     2.00     4.47
   0.433    0.350    0.783       2.460       0.012         0.416         0.114
  UPNY  CGCOS0131022050304 01                BG1: 8.0 0.35  0.25  3.22    44.   0.
  23.10  2.94  2.94      178.       144.       322.     1.74     1.41     3.15
   0.305    0.246    0.551       0.394       0.005         0.293         0.080
  UPNY  CGCOD0131022050307 01                BE3:18.4 0.23  0.21  0.55    50.   0.
  23.30  3.84  3.84      202.       163.       366.     1.62     1.31     2.93
   0.184    0.149    0.333       0.313       0.001         0.273         0.074
Cgn_Gas                         23
  UPNY  CGCT 0112   000000 00                GAS      0.13  0.00  0.00    13.   0.
   2.80  1.03  1.03        3.         2.         5.     0.03     0.02     0.05
   0.002    0.001    0.003       0.000       0.000         0.003         0.001
  UPNY  CGCT 0122   000000 00                GAS      0.13  0.00  0.00   145.   0.
   2.80  1.03  1.03       34.        25.        58.     0.34     0.25     0.59
   0.021    0.016    0.037       0.000       0.000         0.031         0.009
  UPNY  CGCC 0112   000000 00                GAS      0.16  0.00  0.00   139.   0.
  13.90  1.03  1.03      467.        72.       539.     3.96     0.61     4.57
   0.319    0.049    0.368       0.000       0.000         0.242         0.066
  UPNY  CGCC 0113   000000 00                GAS      0.19  0.00  0.00   153.   0.
  14.00  1.03  1.03      103.        26.       129.     0.97     0.25     1.22
   0.091    0.023    0.114       0.000       0.000         0.065         0.018
  UPNY  CGCC 0122   000000 00                GAS      0.18  0.00  0.00  1566.   0.
  13.90  1.03  1.03     6266.      3077.      9343.    50.45    24.77    75.22
   4.616    2.267    6.883       0.000       0.000         3.992         1.089
  UPNY  CGCC 0123   000000 00                GAS      0.19  0.00  0.00   877.   0.
  13.90  1.03  1.03      433.       150.       583.     4.06     1.41     5.47
   0.380    0.132    0.512       0.000       0.000         0.290         0.079
Cgn_Oil                         24
Cgn_Other                       25
  UPNY  CGOTH00     000000 00                NONE     0.00  0.00 71.00    44.   0.
 103.60  0.00  0.00      191.       147.       338.     2.55     1.97     4.52
   0.000    0.000    0.000       0.000       0.160         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
```

```
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
  UPNY  TSXBS0141022020103 01     SCR1     BE3:18.4 0.05  0.09  1.84   149.  11.
  43.60  3.98  3.98      618.       491.      1110.     5.85     4.64    10.49
   0.146    0.116    0.262       0.462       0.010         0.977         0.266
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  UPNY  TSCBU0141022020210 01     RL01     BE3:18.4 0.05  0.09  1.84   379.  41.
  45.09  3.58  3.58     1572.      1249.      2821.    16.70    13.26    29.96
   0.417    0.332    0.749       1.318       0.028         2.790         0.761
  UPNY  TSGBU0141022020210 01     RL01     BE3:18.4 0.05  0.09  1.84   403.  40.
  44.69  3.58  3.58     1674.      1330.      3003.    17.77    14.12    31.89
   0.444    0.353    0.797       1.403       0.029         2.970         0.810
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: DSNY     (Emissions By Plant)
--------------------------------------------------

            NOx                  SO2         MER           CO2          Carbon
```

```
                      Generation                          Trillion
         Emission             Emission    Emission      Emission       Emission
                                                       (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                           (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  DSNYNYTSABU0141012020110 01              BA2: 5.2 0.38  1.10  3.31   541.   0.
  25.60  1.54  1.54     2245.      1783.      4028.    22.87    18.16    41.03
   4.287    3.405    7.692      22.564       0.068         3.820         1.042
  DSNYNYTSABU0142012020110 01              BA2: 5.2 0.37  0.80  3.31   197.   0.
  26.40  1.54  1.54      818.       544.      1362.     8.87     5.90    14.77
   1.636    1.088    2.724       5.913       0.024         1.375         0.375
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  DSNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   967.   0.
 237.60  1.25  1.25     2820.      3469.      6289.    28.53    35.10    63.63
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  DSNY  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   442.   0.
  14.60  0.00  0.00     1237.       824.      2061.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  DSNY  CC   0122   000000 00              GAS      0.02  0.00  0.00  1830.   0.
  13.90  1.03  1.03     8202.      6291.     14493.    61.51    47.18   108.70
   0.615    0.472    1.087       0.000       0.000         5.769         1.573
  DSNY  CC   0123   000000 00              GAS      0.19  0.00  0.00   101.   0.
  13.90  1.03  1.03       23.        52.        75.     0.25     0.58     0.83
   0.023    0.054    0.077       0.000       0.000         0.044         0.012
IGCC                          10
Turbine                       11
  DSNY  CT   0114   000000 00              GAS      0.13  0.00  0.00   104.   0.
  10.90  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
Biomass                       12
Geothermal                    13
Landfill Gas                  14
Wind                          15
  DSNY  WIND 00     000000 00              NONE     0.00  0.00 71.00    64.   0.
  26.40  0.00  0.00       29.        16.        45.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
  DSNY  OTHER00     000000 00              NONE     0.00  0.00 71.00    82.   0.
 103.60  0.00  0.00      361.       285.       646.     3.98     3.14     7.11
   0.000    0.000    0.000       0.000       0.252         0.000         0.000
Fossil_Other                  19
Pump Storage                  20
  DSNY  PUMPS00     000000 00              NONE     0.00  0.00 71.00  1040.   0.
   6.50  0.00  0.00       92.       155.       247.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                  21
Cgn_Coal                      22
Cgn_Gas                       23
  DSNY  CGCC 0113   000000 00              GAS      0.19  0.00  0.00    35.   0.
  13.90  1.03  1.03       71.        18.        89.     0.66     0.17     0.83
   0.062    0.016    0.077       0.000       0.000         0.044         0.012
```

```
  DSNY  CGCC 0123   000000 00              GAS      0.19  0.00  0.00   487.   0.
  13.90  1.03  1.03      820.       251.      1071.     7.73     2.36    10.09
   0.723    0.221    0.944       0.000       0.000         0.536         0.146
Cgn_Oil                        24
Cgn_Other                      25
  DSNY  CGOTH00     000000 00              NONE     0.00  0.00 71.00     7.   0.
 103.60  0.00  0.00        30.        23.        54.     0.13     0.10     0.23
   0.000    0.000    0.000       0.000       0.008         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Year: 2015, Region: NYC      (Emissions By Plant)
-----------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
Oil/Gas Steam                  5
  NYC   STLSU0121   000000 00              GAS      0.14  0.00  0.00  4747.   0.
  20.90  0.00  2.57        0.      3697.      3697.     0.00    35.27    35.27
   0.000    2.416    2.416       0.000       0.000         1.872         0.510
Oil/Gas Steam_Nox              6
Nuclear                        7
Hydro                          8
Comb.Cycle Gas                 9
  NYC   CC   0122   000000 00              GAS      0.10  0.00  0.00   490.   0.
  13.90  1.03  1.03      988.       758.      1746.     7.91     6.07    13.98
   0.411    0.316    0.727       0.000       0.000         0.742         0.202
  NYC   CC   0123   000000 00              GAS      0.19  0.00  0.00    78.   0.
  13.90  1.03  1.03       17.        13.        31.     0.19     0.15     0.34
   0.018    0.014    0.032       0.000       0.000         0.018         0.005
  NYC   CC   1     (b)                     GAS      0.02  0.00  0.00  1106.  72.
  11.70  1.95  1.95     5089.      2822.      7911.    35.91    19.92    55.82
   0.359    0.199    0.558       0.000       0.000         2.962         0.808
IGCC                          10
Turbine                       11
  NYC   CT   0113   000000 00              GAS      0.13  0.00  0.00    85.   0.
  11.20  1.03  1.03       20.        15.        34.     0.25     0.19     0.44
   0.016    0.012    0.028       0.000       0.000         0.024         0.006
  NYC   CT   0122   000000 00              GAS      0.08  0.00  0.00   460.   0.
   2.80  1.03  1.03      319.        79.       399.     3.49     0.87     4.36
   0.140    0.035    0.174       0.000       0.000         0.231         0.063
  NYC   CT   0124   000000 00              GAS      0.13  0.00  0.00   762.   0.
  11.20  1.03  1.03      118.        46.       164.     1.68     0.65     2.33
   0.107    0.041    0.148       0.000       0.000         0.124         0.034
Biomass                       12
Geothermal                    13
Landfill Gas                  14
Wind                          15
  NYC   WIND 00     000000 00              NONE     0.00  0.00 71.00    59.   0.
  26.40  0.00  0.00       27.        15.        41.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
Fossil_Other                  19
Pump Storage                  20
Int. Imports                  21
Cgn_Coal                      22
Cgn_Gas                       23
  NYC   CGCT 0112   000000 00              GAS      0.13  0.00  0.00     2.   0.
   2.80  1.03  1.03        1.         3.         4.     0.01     0.03     0.04
```

```
   0.001    0.002    0.003       0.000       0.000         0.002         0.001
  NYC   CGCC 0112   000000 00               GAS      0.19  0.00  0.00    15.   0.
  13.90  1.03  1.03       30.        23.        53.     0.27     0.20     0.47
   0.025    0.019    0.044       0.000       0.000         0.025         0.007
  NYC   CGCC 0113   000000 00               GAS      0.19  0.00  0.00    46.   0.
  14.10  1.03  1.03       93.        71.       164.     0.85     0.65     1.50
   0.079    0.061    0.140       0.000       0.000         0.079         0.022
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Year: 2015, Region: LILC     (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
Hydro                          8
Comb.Cycle Gas                 9
  LILC  CC   0113   000000 00              GAS      0.19  0.00  0.00    22.   0.
  19.90  1.03  1.03       15.        11.        26.     0.16     0.13     0.29
   0.015    0.012    0.027       0.000       0.000         0.015         0.004
  LILC  CC   0122   000000 00              GAS      0.06  0.00  0.00   136.   0.
  13.90  1.03  1.03      457.       351.       808.     3.60     2.76     6.36
   0.106    0.081    0.188       0.000       0.000         0.337         0.092
  LILC  CC   1     (b)                     GAS      0.02  0.00  0.00  1998.  72.
  11.70  1.95  1.95     9189.      6632.     15821.    64.84    46.79   111.63
   0.648    0.468    1.116       0.000       0.000         5.924         1.616
IGCC                          10
Turbine                       11
  LILC  CT   0112   000000 00              GAS      0.10  0.00  0.00     9.   0.
  11.20  1.03  1.03        7.        14.        21.     0.07     0.14     0.21
   0.004    0.007    0.011       0.000       0.000         0.011         0.003
  LILC  CT   0114   000000 00              GAS      0.13  0.00  0.00   332.   0.
  11.10  0.00  1.03        0.        57.        57.     0.00     0.81     0.81
   0.000    0.052    0.052       0.000       0.000         0.043         0.012
  LILC  CT   0122   000000 00              GAS      0.08  0.00  0.00   405.   0.
   2.80  1.03  1.03      281.       210.       491.     3.07     2.29     5.36
   0.123    0.092    0.215       0.000       0.000         0.285         0.078
  LILC  CT   0123   000000 00              GAS      0.12  0.00  0.00   902.   0.
  10.30  0.00  1.03        0.       155.       155.     0.00     2.05     2.05
   0.000    0.124    0.124       0.000       0.000         0.109         0.030
  LILC  CT   0124   000000 00              GAS      0.11  0.00  0.00   205.   0.
  11.20  0.00  1.03        0.        35.        35.     0.00     0.50     0.50
   0.000    0.027    0.027       0.000       0.000         0.027         0.007
Biomass                       12
Geothermal                    13
Landfill Gas                  14
Wind                          15
  LILC  WIND 00     000000 00              NONE     0.00  0.00 71.00    36.   0.
  26.40  0.00  0.00       16.         9.         25.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
  LILC  OTHER00     000000 00              NONE     0.00  0.00 59.78   137.   0.
 103.60  0.00  0.00      604.       476.      1080.     6.64     5.24    11.88
   0.000    0.000    0.000       0.000       0.355         0.000         0.000
```

```
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
Cgn_Gas                         23
  LILC  CGCT 0111   000000 00              GAS      0.13  0.00  0.00     1.   0.
   2.80  1.03  1.03        2.         2.         4.     0.02     0.01     0.03
   0.001    0.001    0.002       0.000       0.000         0.002         0.000
  LILC  CGCT 0112   000000 00              GAS      0.13  0.00  0.00    15.   0.
   2.80  1.03  1.03       31.        23.        55.     0.31     0.23     0.54
   0.020    0.015    0.034       0.000       0.000         0.029         0.008
  LILC  CGCC 0112   000000 00              GAS      0.19  0.00  0.00    13.   0.
  13.90  1.03  1.03       58.        45.       103.     0.44     0.34     0.78
   0.041    0.032    0.073       0.000       0.000         0.041         0.011
  LILC  CGCC 0113   000000 00              GAS      0.19  0.00  0.00    61.   0.
  13.90  1.03  1.03       41.        94.       135.     0.42     0.96     1.38
   0.039    0.090    0.129       0.000       0.000         0.073         0.020
  LILC  CGCC 0122   000000 00              GAS      0.19  0.00  0.00    43.   0.
  13.90  1.03  1.03      145.       111.       255.     1.09     0.84     1.93
   0.102    0.078    0.180       0.000       0.000         0.102         0.028
Cgn_Oil                         24
Cgn_Other                       25
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
  LILC  STLSU0121   000000 00     OC01     GAS      0.02  0.00  0.00   322.  65.
  11.70  1.95  1.95     1441.      1105.      2547.    10.41     7.98    18.39
   0.104    0.080    0.184       0.000       0.000         0.976         0.266
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
Ret.ExistScrub & SCR            41
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
Ret.ExistScrub+GasR             47
Ret.GasReburn+Scrub             48
Ret.ACI                         49
Ret.ExistScrub&ACI              50
Ret.ExistSCR&ACI                51
Ret.ExistSNCR&ACI               52
Ret.ACI & SCR                   53
Ret.ExistScrub&ACI&SCR          54
Ret.ACI & SNCR                  55
Ret.ExistScrub&ACI&SNCR         56
Ret.ACI & Srub                  57
Ret.ExistSCR&ACI&Scrub          58
Ret.ExistSNCR&ACI&Scrub         59
Ret.ExistSNCR&ExistScrub&ACI    60
Ret.ExistSCR&ExistScrub&ACI     61
Ret.ExistNOx&ExistScrub&ACI     62
Ret.SCR & Scrub & ACI           63
Ret.SNCR & Scrub & ACI          64
Ret.O/G SCR                     65
```

```
Ret.O/G SNCR                    66
Ret.Nuclear (age 30+10 yrs)     67
Ret.Nuclear (age 40+20 yrs)     68
Ret. Biomass Cofiring           69
CT Early Retirement             70
CC Early Retirement             71
O/G Early Retirement            72
Coal Early Retirement           73
Nuke Early Retirement           74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: NENG     (Emissions By Plant)
--------------------------------------------------


            NOx                   SO2         MER           CO2           Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
  NENG  TSDBD2831012020107 01              BE3:18.4 0.20  0.11  6.26    78.   0.
  43.10  3.85  3.85      324.       257.       581.     3.37     2.68     6.04
   0.339    0.269    0.607       0.332       0.019         0.563         0.153
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
  NENGNHTCOLN2931012020102 01              BA2: 5.2 0.30  1.10  3.31    97.   0.
  32.20  2.45  2.45      337.       206.       543.     3.51     2.14     5.64
   0.524    0.320    0.844       3.104       0.009         0.526         0.143
  NENG  TSDBN2841012020102 01              BA2: 5.2 0.19  1.10  3.31   142.   0.
  32.20  2.45  2.45      379.       210.       588.     3.91     2.16     6.07
   0.379    0.210    0.589       3.337       0.010         0.565         0.154
Unscrubbed Coal                4
  NENG  TCOLU0911012050710 01              BA2: 5.2 0.43  1.10  5.17    14.   0.
  22.40  1.54  1.54       58.        46.       104.     0.60     0.48     1.08
   0.130    0.103    0.233       0.596       0.003         0.101         0.028
  NENGCTTSABU3241012020110 01              BA2: 5.2 0.24  1.10  3.31   385.   0.
  26.40  1.54  1.54      433.       344.       776.     4.17     3.31     7.48
   0.492    0.391    0.883       4.115       0.012         0.697         0.190
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  NENG  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   675.   0.
 254.10  1.32  1.32     3434.      1891.      5326.    34.95    19.25    54.20
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   506.   0.
 240.70  1.18  1.18     2575.      1663.      4237.    26.06    16.83    42.90
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   872.   0.
 211.90  1.17  1.17     4199.      2661.      6860.    42.63    27.01    69.64
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1157.   0.
```

```
 158.10  1.23  1.23     5326.      3794.      9120.    53.06    37.80    90.86
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1161.   0.
 122.00  0.75  0.75     4883.      4259.      9142.    49.58    43.24    92.81
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  NENG  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2059.   0.
  15.20  0.00  0.00     3489.      1724.      5212.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  NENG  CC   0113   000000 00              GAS      0.11  0.00  0.00    96.   0.
  19.30  1.03  1.03       21.        16.        38.     0.24     0.18     0.42
   0.013    0.010    0.024       0.000       0.000         0.022         0.006
  NENG  CC   0122   000000 00              GAS      0.03  0.00  0.00  5859.   0.
  14.00  1.03  1.03    21733.     14033.     35766.   165.45   106.83   272.29
   2.730    1.763    4.493       0.000       0.000        14.450         3.941
  NENG  CC   0123   000000 00              GAS      0.12  0.00  0.00  1003.   0.
  14.20  0.00  1.03        0.       172.       172.     0.00     1.91     1.91
   0.000    0.117    0.117       0.000       0.000         0.101         0.028
  NENG  CC   0912   000000 00              GAS      0.02  0.00  0.00    33.   0.
  13.90  1.03  1.03      148.       113.       261.     1.11     0.85     1.96
   0.011    0.009    0.020       0.000       0.000         0.104         0.028
  NENG  CC   0922   000000 00              GAS      0.02  0.00  0.00  1351.   0.
  13.90  1.03  1.03     6055.      4644.     10699.    45.41    34.83    80.25
   0.454    0.348    0.802       0.000       0.000         4.259         1.161
  NENGCTCC   3222   000000 00              GAS      0.04  0.00  0.00  1684.   0.
  13.90  1.03  1.03     7547.      5789.     13337.    57.37    44.00   101.37
   1.090    0.836    1.926       0.000       0.000         5.380         1.467
  NENGNHCC   3022   000000 00              GAS      0.02  0.00  0.00  1245.   0.
  13.90  1.03  1.03     5580.      4280.      9860.    41.85    32.10    73.95
   0.418    0.321    0.739       0.000       0.000         3.925         1.070
IGCC                           10
Turbine                        11
  NENG  CT   0112   000000 00              GAS      0.11  0.00  0.00    37.   0.
   9.30  1.03  1.03       26.        19.        45.     0.25     0.19     0.44
   0.014    0.011    0.025       0.000       0.000         0.023         0.006
  NENG  CT   0122   000000 00              GAS      0.08  0.00  0.00   693.   0.
   2.80  0.00  1.03        0.       119.       119.     0.00     1.31     1.31
   0.000    0.054    0.054       0.000       0.000         0.070         0.019
  NENG  CT   0912   000000 00              GAS      0.13  0.00  0.00     1.   0.
  11.20  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENGCTCT   3212   000000 00              GAS      0.12  0.00  0.00     6.   0.
  10.60  1.03  1.03        4.         3.         7.     0.04     0.03     0.07
   0.002    0.002    0.004       0.000       0.000         0.004         0.001
  NENGCTCT   3222   000000 00              GAS      0.08  0.00  0.00   333.   0.
   2.80  1.03  1.03       77.        57.       134.     0.84     0.63     1.47
   0.034    0.025    0.059       0.000       0.000         0.078         0.021
Biomass                        12
  NENG  BIOMS00  48 000000 00              B1-: 0.6 0.02  0.08  0.57   309.   0.
  44.80  5.36  5.36      602.       434.      1037.     5.52     3.98     9.50
   0.055    0.040    0.095       0.380       0.003         0.000         0.000
  NENG  BIOCC0     (a)                     B1-: 0.6 0.02  0.08  0.57    30. 215.
  44.80  5.34  5.34      132.        95.       227.     1.09     0.78     1.87
   0.011    0.008    0.019       0.075       0.001         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  NENG  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    18.   0.
  78.60 10.48 10.48       81.        61.       142.     1.10     0.84     1.94
   0.135    0.103    0.238       0.000       0.000         0.000         0.000
  NENG  LG   0     (a)                     WASTE    0.25  0.00  0.00   145. 195.
  78.60 10.48 10.48      626.       452.      1078.     6.26     4.52    10.78
   0.770    0.556    1.326       0.000       0.000         0.000         0.000
Wind                           15
  NENG  WIND 00     000000 00              NONE     0.00  0.00 71.00    31.   0.
```

```
  26.40  0.00  0.00       14.         8.        22.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  WIN510     (a)                    NONE     0.00  0.00 71.00   447. 155.
  26.40  0.00  0.00      851.       437.      1288.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
  NENG  FCELL00     000000 00              GAS      0.40  0.00  0.00     1.   0.
  15.00  2.06  2.06        3.         2.         5.     0.03     0.01     0.04
   0.005    0.002    0.007       0.000       0.000         0.002         0.001
Solar                          17
Non Fossil_Other               18
  NENG  OTHER00     000000 00              NONE     0.00  0.00 70.72   537.   0.
 103.60  0.00  0.00     2367.      1867.      4234.    26.04    20.53    46.57
   0.000    0.000    0.000       0.000       1.647         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
  NENG  PUMPS00     000000 00              NONE     0.00  0.00 71.00  1959.   0.
   6.50  0.00  0.00      405.       292.       697.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
  NENG  NHIMP00     000000 00              NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00     4905.      3540.      8445.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                       22
  NENG  CGCOU0931012050710 01              BA2: 5.2 0.43  1.10  5.17    76.   0.
  11.70  1.54  1.54      308.       248.       556.     2.63     2.12     4.75
   0.566    0.456    1.022       2.614       0.012         0.443         0.121
Cgn_Gas                        23
  NENG  CGCT 0912   000000 00              GAS      0.10  0.00  0.00     7.   0.
   2.80  1.03  1.03        5.         4.         8.     0.05     0.04     0.08
   0.002    0.002    0.004       0.000       0.000         0.004         0.001
  NENG  CGCT 0922   000000 00              GAS      0.08  0.00  0.00   346.   0.
   2.80  1.03  1.03       80.        60.       140.     0.87     0.65     1.53
   0.035    0.026    0.061       0.000       0.000         0.081         0.022
  NENGCTCGCT 3112   000000 00              GAS      0.13  0.00  0.00     3.   0.
   2.80  1.03  1.03        2.         2.         4.     0.02     0.01     0.03
   0.001    0.001    0.002       0.000       0.000         0.002         0.001
  NENGNHCGCT 3012   000000 00              GAS      0.08  0.00  0.00     5.   0.
   2.80  1.03  1.03        1.         1.         2.     0.01     0.01     0.02
   0.001    0.000    0.001       0.000       0.000         0.001         0.000
  NENG  CGCC 0113   000000 00              GAS      0.12  0.00  0.00    13.   0.
  13.90  1.03  1.03        9.         7.        15.     0.08     0.06     0.14
   0.005    0.004    0.009       0.000       0.000         0.008         0.002
  NENG  CGCC 0122   000000 00              GAS      0.12  0.00  0.00   661.   0.
  13.90  1.03  1.03      683.       646.      1329.     5.46     5.16    10.62
   0.330    0.312    0.643       0.000       0.000         0.564         0.154
  NENG  CGCC 0123   000000 00              GAS      0.13  0.00  0.00   132.   0.
  13.90  1.03  1.03       89.        68.       157.     0.85     0.65     1.50
   0.055    0.042    0.097       0.000       0.000         0.080         0.022
  NENGCTCGCC 3112   000000 00              GAS      0.20  0.00  0.00    13.   0.
  13.90  1.03  1.03       26.        20.        46.     0.21     0.16     0.38
   0.021    0.016    0.038       0.000       0.000         0.020         0.005
  NENGCTCGCC 3113   000000 00              GAS      0.20  0.00  0.00     1.   0.
  14.90  1.03  1.03        1.         1.         1.     0.01     0.00     0.01
   0.001    0.000    0.001       0.000       0.000         0.001         0.000
  NENGCTCGCC 3122   000000 00              GAS      0.04  0.00  0.00    32.   7.
  15.60  1.13  1.13       22.        16.        38.     0.18     0.13     0.31
   0.004    0.003    0.006       0.000       0.000         0.016         0.004
  NENGCTCGCC 3123   000000 00              GAS      0.04  0.00  0.00    73.   6.
  16.50  1.13  1.13       49.        38.        87.     0.49     0.37     0.86
   0.010    0.007    0.017       0.000       0.000         0.046         0.012
Cgn_Oil                        24
Cgn_Other                      25
  NENG  CGBIO00  48 000000 00              B1-: 0.6 0.02  0.08  0.57    72.   0.
  44.80  5.36  5.36      312.       108.       421.     2.66     0.93     3.59
```

```
   0.027    0.009    0.036       0.144       0.001         0.000         0.000
  NENG  CGOTH00     000000 00              NONE     0.00  0.00 52.33    27.   0.
 103.60  0.00  0.00      117.        90.       207.     0.19     0.14     0.33
   0.000    0.000    0.000       0.000       0.009         0.000         0.000
NonCG IPP_Coal                26
NonCG IPP_Gas                 27
NonCG IPP_Other               28
Blr_Coal                      29
Blr_Gas                       30
Blr_Oil                       31
Blr_Other                     32
SteamOnly Cogen               33
Rep.Coal-CC                   34
  NENG  TSDBN2831012020102 01     CC01     GAS      0.02  0.00  0.00   152.  65.
  11.70  1.95  1.95      681.       523.      1204.     4.92     3.77     8.69
   0.049    0.038    0.087       0.000       0.000         0.461         0.126
  NENG  TSEBN2842012020102 01     CC01     GAS      0.02  0.00  0.00    61.  65.
  11.70  1.95  1.95      273.       210.       483.     1.97     1.51     3.49
   0.020    0.015    0.035       0.000       0.000         0.185         0.050
Rep.O/G-CC                    35
  NENG  CGHSC2821   000000 00     OC01     GAS      0.02  0.00  0.00    13.  65.
  11.70  1.95  1.95       59.        45.       104.     0.43     0.33     0.75
   0.004    0.003    0.008       0.000       0.000         0.040         0.011
Rep.Coal-IGCC                 36
Ret.Scrubber                  37
  NENGCTTSABU3241012020110 01     ML02     BA2: 5.2 0.24  0.04  1.76   101.  26.
  36.57  2.51  2.51      417.       332.       749.     4.11     3.26     7.37
   0.485    0.385    0.870       0.162       0.006         0.686         0.187
Ret.ExistSCR & Scrub          38
  NENGNHTSABC2941011010101 01     ML01     BE3:18.4 0.10  0.09  1.84   424.  28.
  40.11  3.49  3.49     1759.      1397.      3157.    17.34    13.77    31.11
   0.858    0.682    1.540       1.369       0.029         2.897         0.790
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
Ret.ExistScrub & SCR          41
  NENGCTCGCOS3141012050703 01     SCR1     BE3:18.4 0.05  0.11  1.84   195.  10.
  23.70  3.94  3.94      789.       637.      1426.     7.64     6.16    13.80
   0.191    0.154    0.345       0.759       0.013         1.285         0.351
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  NENGCTTSABU3241012020110 01     RL02     BA2: 5.2 0.05  0.04  0.52   174.  34.
  37.07  3.43  3.43      723.       575.      1298.     7.12     5.65    12.77
   0.178    0.141    0.319       0.281       0.003         1.190         0.324
  NENG  TSEBU2841012020110 01     RL02     BE3:18.4 0.05  0.09  1.84   364.  38.
  41.03  3.44  3.44     1511.      1200.      2712.    14.38    11.42    25.79
   0.359    0.285    0.645       1.135       0.024         2.402         0.655
  NENG  TSEBU2841012020110 01     SCR1ML02 BE3:18.4 0.05  0.09  1.84   804.  38.
  41.04  3.44  3.44     3336.      2649.      5985.    31.73    25.20    56.93
   0.793    0.630    1.423       2.505       0.052         5.302         1.446
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
```

```
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: FRCC     (Emissions By Plant)
--------------------------------------------------


            NOx                   SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  FRCCFLTSXBA1541122020105 01              BG1: 8.0 0.15  0.20  0.80   441.   0.
  23.60  3.91  3.91     1830.      1454.      3284.    19.03    15.12    34.15
   1.428    1.134    2.561       3.415       0.014         3.180         0.867
  FRCCFLTSXBA1541132020105 01              BG1: 8.0 0.10  0.25  0.80   430.   0.
  43.30  3.91  3.91     1785.      1417.      3202.    17.05    13.54    30.59
   0.852    0.677    1.530       3.824       0.012         2.849         0.777
  FRCCFLTSABA1541132020105 01              BE1: 6.1 0.10  0.11  0.61   842.   0.
  43.30  3.91  3.91     3494.      2775.      6270.    33.22    26.38    59.60
   1.661    1.319    2.980       3.278       0.018         5.550         1.514
  FRCCFLTSZBA1541122020105 01              BG1: 8.0 0.10  0.25  0.80   439.   0.
  41.20  3.91  3.91     1822.      1447.      3269.    17.30    13.74    31.05
   0.865    0.687    1.552       3.881       0.012         2.891         0.789
Scrubbed Coal                  2
  FRCCFLTSGBS1531132020103 01              BD1: 5.1 0.31  0.54  1.72    88.   0.
  43.00  2.94  2.94      365.       290.       655.     3.76     2.99     6.75
   0.574    0.456    1.029       1.812       0.006         0.629         0.171
  FRCCFLTSGBS1532132020103 01              BD1: 5.1 0.35  0.51  1.72    87.   0.
  43.00  2.94  2.94      361.       287.       648.     3.86     3.07     6.93
   0.678    0.538    1.217       1.773       0.006         0.646         0.176
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  FRCCFLTCOLU1531132020110 01              BB2: 4.1 0.46  1.00  2.62    92.   0.
  32.00  1.54  1.54      382.       303.       685.     3.97     3.15     7.12
   0.913    0.725    1.639       3.562       0.009         0.663         0.181
  FRCCFLTSDBU1541132020210 01              BB1: 3.4 0.31  1.00  3.07   218.   0.
```

```
  22.40  1.54  1.54      905.       719.      1623.     9.23     7.33    16.56
   1.435    1.140    2.575       8.279       0.025         1.542         0.421
Oil/Gas Steam                   5
  FRCCFLSTLSU1521   000000 00              GAS      0.24  0.00  0.00  6501.   0.
  19.30  0.00  2.57        0.      1756.      1756.     0.00    17.44    17.44
   0.000    2.128    2.128       0.000       0.000         0.926         0.252
Oil/Gas Steam_Nox               6
Nuclear                         7
  FRCC  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   847.   0.
 143.80  0.53  0.53     3987.      3107.      7094.    43.55    33.94    77.49
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  FRCC  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   700.   0.
 155.20  0.57  0.57     3140.      2437.      5577.    34.61    26.86    61.47
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  FRCC  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   700.   0.
 155.20  0.57  0.57     3380.      2450.      5829.    37.23    26.98    64.21
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  FRCC  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   842.   0.
 232.80  1.24  1.24     3872.      2780.      6651.    41.31    29.66    70.97
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  FRCC  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   847.   0.
 143.80  0.53  0.53     3584.      3092.      6676.    39.80    34.33    74.12
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  FRCC  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00    47.   0.
  15.10  0.00  0.00       83.        38.       121.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  FRCCFLCC   1512   000000 00              GAS      0.05  0.00  0.00    85.   0.
  19.90  1.03  1.03      381.       292.       673.     2.97     2.28     5.24
   0.077    0.059    0.136       0.000       0.000         0.278         0.076
  FRCCFLCC   1513   000000 00              GAS      0.11  0.00  0.00    89.   0.
  19.50  1.03  1.03       60.       138.       197.     0.59     1.36     1.96
   0.031    0.072    0.104       0.000       0.000         0.104         0.028
  FRCCFLCC   1522   000000 00              GAS      0.05  0.00  0.00 15348.   0.
  14.10  1.03  1.03    38230.     37394.     75625.   296.25   289.77   586.02
   7.554    7.389   14.943       0.000       0.000        31.100         8.482
  FRCCFLCC   1523   000000 00              GAS      0.15  0.00  0.00   789.   0.
  19.40  1.03  1.03      108.       406.       514.     1.19     4.51     5.70
   0.088    0.334    0.422       0.000       0.000         0.303         0.083
  FRCCFLCC   1524   000000 00              GAS      0.10  0.00  0.00    34.   0.
  13.90  0.00  1.03        0.         6.         6.     0.00     0.07     0.07
   0.000    0.003    0.003       0.000       0.000         0.004         0.001
IGCC                           10
  FRCCFLIGCC 1541122050710 00              BG1: 8.0 0.10  0.00  0.40   250.   0.
  31.40  1.00  1.00     1083.       837.      1921.     7.88     6.09    13.97
   0.394    0.305    0.699       0.000       0.003         1.301         0.355
Turbine                        11
  FRCCFLCT   1512   000000 00              GAS      0.10  0.00  0.00    68.   0.
   9.60  1.03  1.03       16.       106.       121.     0.16     1.10     1.26
   0.008    0.057    0.066       0.000       0.000         0.067         0.018
  FRCCFLCT   1513   000000 00              GAS      0.10  0.00  0.00    30.   0.
  11.20  0.00  1.03        0.         5.         5.     0.00     0.07     0.07
   0.000    0.004    0.004       0.000       0.000         0.004         0.001
  FRCCFLCT   1514   000000 00              GAS      0.11  0.00  0.00   389.   0.
  10.10  0.00  1.03        0.        67.        67.     0.00     0.96     0.96
   0.000    0.053    0.053       0.000       0.000         0.051         0.014
  FRCCFLCT   1522   000000 00              GAS      0.08  0.00  0.00  5658.   0.
   3.00  1.03  1.03     1308.      4913.      6220.    14.35    53.90    68.25
   0.588    2.210    2.798       0.000       0.000         3.622         0.988
  FRCCFLCT   1523   000000 00              GAS      0.12  0.00  0.00  2073.   0.
  10.10  0.00  1.03        0.       357.       357.     0.00     4.55     4.55
   0.000    0.271    0.271       0.000       0.000         0.242         0.066
  FRCCFLCT   1524   000000 00              GAS      0.11  0.00  0.00  2182.   0.
  10.20  0.00  1.03        0.        14.        14.     0.00     0.21     0.21
```

```
   0.000    0.011    0.011       0.000       0.000         0.011         0.003
Biomass                          12
  FRCC  BIOMS00  49 000000 00              B1-: 0.6 0.02  0.08  0.57    54.   0.
  44.80  5.36  5.36      234.       181.       415.     2.16     1.67     3.83
   0.022    0.017    0.038       0.153       0.001         0.000         0.000
Geothermal                       13
Landfill Gas                     14
  FRCC  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     2.   0.
  78.60 10.48 10.48        9.         7.        16.     0.12     0.09     0.22
   0.015    0.011    0.026       0.000       0.000         0.000         0.000
Wind                             15
Fuel Cell                        16
Solar                            17
Non Fossil_Other                 18
  FRCC  OTHER00     000000 00              NONE     0.00  0.00 60.92   424.   0.
 103.60  0.00  0.00     1869.      1474.      3343.    20.56    16.21    36.77
   0.000    0.000    0.000       0.000       1.120         0.000         0.000
Fossil_Other                     19
Pump Storage                     20
Int. Imports                     21
Cgn_Coal                         22
Cgn_Gas                          23
  FRCCFLCGCT 1512   000000 00              GAS      0.11  0.00  0.00    27.   0.
   2.80  1.03  1.03        6.        42.        48.     0.06     0.42     0.48
   0.004    0.024    0.027       0.000       0.000         0.026         0.007
  FRCCFLCGCT 1522   000000 00              GAS      0.09  0.00  0.00   336.   0.
   2.80  1.03  1.03       78.       174.       252.     0.86     1.93     2.80
   0.041    0.091    0.131       0.000       0.000         0.148         0.040
  FRCCFLCGCC 1513   000000 00              GAS      0.14  0.00  0.00    18.   0.
  13.90  1.03  1.03       12.        28.        40.     0.12     0.27     0.39
   0.008    0.019    0.028       0.000       0.000         0.021         0.006
  FRCCFLCGCC 1522   000000 00              GAS      0.14  0.00  0.00   437.   0.
  13.90  1.03  1.03      294.       676.       970.     2.37     5.45     7.82
   0.167    0.384    0.551       0.000       0.000         0.415         0.113
  FRCCFLCGCC 1523   000000 00              GAS      0.14  0.00  0.00   454.   0.
  13.90  1.03  1.03      208.       702.       910.     2.01     6.77     8.78
   0.142    0.477    0.619       0.000       0.000         0.466         0.127
Cgn_Oil                          24
  FRCCFLCGGAU1511   000000 00              GAS      0.29  0.00  0.00    16.   0.
  16.70  0.00  2.57        0.        29.        29.     0.00     0.25     0.25
   0.000    0.037    0.037       0.000       0.000         0.013         0.004
Cgn_Other                        25
  FRCC  CGBIO00  49 000000 00              B1-: 0.6 0.02  0.08  0.57    61.   0.
  44.80  5.36  5.36      264.       204.       469.     2.26     1.74     4.00
   0.023    0.017    0.040       0.160       0.001         0.000         0.000
  FRCC  CGOTH00     000000 00              NONE     0.00  0.00  0.00    22.   0.
 103.60  0.00  0.00       95.        74.       169.     0.73     0.57     1.30
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                   26
NonCG IPP_Gas                    27
NonCG IPP_Other                  28
Blr_Coal                         29
Blr_Gas                          30
Blr_Oil                          31
Blr_Other                        32
SteamOnly Cogen                  33
Rep.Coal-CC                      34
Rep.O/G-CC                       35
  FRCCFLSTGAU1511   000000 00     OC01     GAS      0.02  0.00  0.00   174.  48.
  11.70  1.95  1.95      780.       598.      1378.     5.63     4.32     9.95
   0.056    0.043    0.099       0.000       0.000         0.528         0.144
  FRCCFLSTHSU1511   000000 00     OC01     GAS      0.02  0.00  0.00    30.  48.
  11.70  1.95  1.95      134.       103.       238.     0.97     0.74     1.72
   0.010    0.007    0.017       0.000       0.000         0.091         0.025
  FRCCFLSTHSU1521   000000 00     OC01     GAS      0.02  0.00  0.00  1660.  48.
```

```
  11.70  1.95  1.95     7438.      5705.     13143.    53.70    41.19    94.89
   0.537    0.412    0.949       0.000       0.000         5.036         1.373
  FRCCFLSTHSU1522   000000 00     OC01     GAS      0.02  0.00  0.00   910.  48.
  11.70  1.95  1.95     4078.      3128.      7207.    29.45    22.59    52.03
   0.294    0.226    0.520       0.000       0.000         2.761         0.753
  FRCCFLSTLSU1511   000000 00     OC01     GAS      0.02  0.00  0.00    98.  48.
  11.70  1.95  1.95      439.       337.       776.     3.17     2.43     5.60
   0.032    0.024    0.056       0.000       0.000         0.297         0.081
  FRCCFLSTLSU1512   000000 00     OC01     GAS      0.02  0.00  0.00    76.  48.
  11.70  1.95  1.95      341.       261.       602.     2.46     1.89     4.35
   0.025    0.019    0.043       0.000       0.000         0.231         0.063
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  FRCCFLTSDBU1541132020110 01     SCR1     BB2: 4.1 0.05  1.00  2.62   833.   8.
  29.30  2.45  2.45     3457.      2746.      6203.    32.93    26.16    59.09
   0.823    0.654    1.477      29.544       0.078         5.502         1.501
  FRCCFLCGCOU1541132050710 01     SCR1     BB1: 3.4 0.05  1.00  3.41   653.  10.
  13.20  2.53  2.53     2643.      2133.      4777.    26.06    21.03    47.10
   0.652    0.526    1.177      23.548       0.080         4.386         1.196
Ret.ExistScrub & SCR           41
  FRCCFLTSEBS1541132020103 01     SCR1     BF1: 6.8 0.05  1.03  0.68   844.   8.
  43.10  3.85  3.85      421.         0.       421.     4.32     0.00     4.32
   0.108    0.000    0.108       2.214       0.001         0.402         0.110
  FRCCFLTSEBS1541132020103 01     SCR1     BE1: 6.1 0.05  0.75  0.61   844.   8.
  43.10  3.85  3.85      332.         0.       332.     3.40     0.00     3.40
   0.085    0.000    0.085       1.281       0.001         0.317         0.086
  FRCCFLTSEBS1541132020103 01     SCR1     BD1: 5.1 0.05  0.51  0.51   844.   8.
  43.10  3.85  3.85     2750.      2782.      5532.    28.20    28.53    56.73
   0.705    0.713    1.418      14.551       0.014         5.283         1.441
  FRCCFLTSGBS1541132020103 01     SCR1     BF1: 6.8 0.05  0.76  0.68   356.  11.
  43.60  3.96  3.96     1477.      1173.      2651.    15.15    12.03    27.18
   0.379    0.301    0.680      10.316       0.009         2.531         0.690
  FRCCFLTSZBS1541121020103 01     SCR2     BG1: 8.0 0.05  0.29  0.80   957.   8.
  41.00  3.84  3.84     3972.      3154.      7126.    38.34    30.45    68.79
   1.016    0.807    1.823       9.974       0.028         6.406         1.747
  FRCCFLTSZBS1541122020103 01     SCR1     BG1: 8.0 0.05  0.50  0.80  2315.   7.
  41.00  3.82  3.82     9608.      7631.     17238.    93.50    74.26   167.76
   2.338    1.857    4.194      41.941       0.067        15.623         4.261
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  FRCCFLTSDBU1541131020110 01     SO01     BG1: 8.0 0.05  0.25  0.80  1365.  27.
  30.58  3.75  3.75     5664.      4498.     10162.    54.04    42.92    96.96
   1.378    1.094    2.472      12.120       0.039         9.029         2.462
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
```

```
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: VACA     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  VACAVATSXBD0341092020307 01              BF2:11.1 0.19  0.12  0.33   882.   0.
  23.30  3.85  3.85     3660.      2907.      6568.    38.07    30.23    68.30
   3.655    2.903    6.557       4.098       0.011         6.361         1.735
  VACA  TSXBA0641101020105 01              BD1: 5.1 0.06  0.08  0.51   270.   0.
  43.30  3.91  3.91     1121.       890.      2010.    11.18     8.88    20.05
   0.330    0.262    0.591       0.752       0.005         1.867         0.509
  VACA  TSXBA0641102020105 01              BD1: 5.1 0.04  0.08  0.51  1100.   0.
  29.80  3.91  3.91     4565.      3626.      8191.    43.46    34.52    77.98
   0.847    0.673    1.521       2.924       0.020         7.261         1.980
  VACA  TSXBA0642101020105 01              BD1: 5.1 0.06  0.08  0.51   270.   0.
  41.20  3.91  3.91     1121.       890.      2010.    11.89     9.44    21.33
   0.339    0.269    0.608       0.800       0.005         1.987         0.542
  VACAVATSBBA0341092020105 01              BF2:11.1 0.01  0.15  1.11   373.   0.
  43.50  3.91  3.91     1548.      1229.      2777.    14.59    11.59    26.18
   0.073    0.058    0.131       1.964       0.015         2.438         0.665
  VACAWVTSABA0641052020105 01              BF2:11.1 0.01  0.15  1.11  1066.   0.
  43.50  3.91  3.91     4424.      3514.      7938.    41.03    32.59    73.62
   0.205    0.163    0.368       5.522       0.041         6.856         1.870
  VACA  TSZBA0641052020105 01              BG1: 8.0 0.01  0.25  0.80   521.   0.
  43.30  3.91  3.91     2162.      1717.      3880.    21.20    16.83    38.03
   0.106    0.084    0.190       4.754       0.015         3.542         0.966
  VACAVATCOLD0331092050308 01              BG1: 8.0 0.24  0.18  3.22    57.   0.
  23.30  3.85  3.85      237.       188.       424.     2.46     1.95     4.41
   0.301    0.239    0.541       0.386       0.007         0.411         0.112
Scrubbed Coal                  2
  VACANCTCOLS0641102050304 01              BD1: 5.1 0.39  0.36  2.03   167.   0.
  23.10  2.94  2.94      693.       550.      1244.     7.21     5.72    12.93
   1.388    1.102    2.490       2.328       0.013         1.204         0.328
```

```
  VACAVATCOLS0331092050304 01                BG1: 8.0 0.38  0.13  3.22    35.   0.
  23.10  2.94  2.94      145.       115.       261.     1.51     1.20     2.71
   0.285    0.226    0.511       0.176       0.004         0.252         0.069
  VACA  TABS 0631042050304 01                BG1: 8.0 0.28  0.20  3.22    74.   0.
  23.10  2.94  2.94      307.       244.       551.     3.19     2.54     5.73
   0.442    0.351    0.794       0.573       0.009         0.534         0.146
  VACA  TSXBS0641102020304 01                BE2:10.4 0.15  0.09  0.52   385.   0.
  23.10  2.94  2.94     1598.      1269.      2867.    16.62    13.20    29.81
   1.246    0.990    2.236       1.312       0.008         2.776         0.757
Unscrubbed Coal_NOx            3
  VACANCTSBBN0641102020102 01                BA2: 5.2 0.26  1.10  3.31   514.   0.
  32.20  2.45  2.45     2133.      1439.      3572.    20.12    13.57    33.69
   2.635    1.777    4.413      18.527       0.056         3.137         0.856
  VACAVATSBBN0341091020102 01                BA2: 5.2 0.35  1.10  3.31   389.   0.
  32.20  2.45  2.45     1352.      1074.      2426.    13.85    11.00    24.85
   2.396    1.903    4.299      13.667       0.041         2.314         0.631
  VACAVATSBBN0341092020102 01                BA2: 5.2 0.22  1.10  3.31   159.   0.
  32.20  2.45  2.45      660.       439.      1099.     6.47     4.31    10.78
   0.709    0.472    1.181       5.930       0.018         1.004         0.274
  VACAVATSBBN0341092020202 01                BA2: 5.2 0.28  1.10  4.65   156.   0.
  32.20  2.45  2.45      542.       431.       973.     5.31     4.22     9.53
   0.735    0.584    1.320       5.240       0.022         0.887         0.242
  VACASCTSEBC0641102020101 01                BA2: 5.2 0.04  1.10  3.31  1180.   0.
  27.00  2.51  2.51     2892.      2297.      5188.    28.28    22.46    50.74
   0.622    0.494    1.116      27.906       0.084         4.725         1.289
  VACASCTSEBC0641102020401 01                BA2: 5.2 0.05  1.10  1.03   350.   0.
  27.00  2.51  2.51     1453.      1154.      2606.    14.24    11.31    25.54
   0.320    0.254    0.575      14.047       0.013         2.378         0.649
  VACANCTOLBO0632102020202 01                BA2: 5.2 0.27  1.10  4.65    76.   0.
  32.30  1.54  1.54      264.       161.       425.     2.84     1.73     4.58
   0.387    0.236    0.622       2.517       0.011         0.426         0.116
  VACA  TSHBO0632102020202 01                BA2: 5.2 0.23  1.10  4.65   200.   0.
  32.30  1.54  1.54      695.       424.      1119.     7.96     4.85    12.81
   0.904    0.551    1.454       7.048       0.030         1.193         0.325
Unscrubbed Coal                4
  VACA  TCOLU0631041050710 01                BA2: 5.2 0.55  1.10  5.17    74.   0.
  11.70  1.54  1.54      257.       204.       462.     2.68     2.12     4.80
   0.738    0.586    1.325       2.640       0.012         0.447         0.122
  VACA  TCOLU0631102050710 01                BA2: 5.2 0.11  0.12  5.17    55.   0.
  11.70  1.54  1.54      228.       181.       410.     2.05     1.63     3.69
   0.113    0.090    0.203       0.223       0.010         0.343         0.094
  VACANCTCOLU0631102020110 01                BA2: 5.2 0.46  1.10  3.31    98.   0.
  32.00  1.54  1.54      341.       208.       548.     3.54     2.16     5.70
   0.815    0.497    1.312       3.136       0.009         0.531         0.145
  VACANCTCOLU0631102020210 01                BA2: 5.2 0.40  1.10  4.65   189.   0.
  32.00  1.54  1.54      657.       400.      1057.     6.83     4.16    11.00
   1.367    0.833    2.200       6.049       0.026         1.024         0.279
  VACAVATCOLU0331092050710 01                BA2: 5.2 0.38  1.10  5.17    57.   0.
  11.70  1.54  1.54      198.       121.       319.     2.06     1.26     3.32
   0.388    0.237    0.625       1.824       0.009         0.309         0.084
  VACANCTOLBU0632101020210 01                BA2: 5.2 0.63  1.10  4.65    97.   0.
  32.00  0.00  1.54        0.       206.       206.     0.00     2.32     2.32
   0.000    0.727    0.727       1.275       0.005         0.216         0.059
  VACANCTOLBU0632102020110 01                BA2: 5.2 0.44  1.10  3.31    79.   0.
  32.00  1.54  1.54      275.       167.       442.     2.92     1.78     4.70
   0.649    0.396    1.044       2.588       0.008         0.438         0.119
  VACAVATOLBU0332092020110 01                BA2: 5.2 0.32  1.10  3.31   100.   0.
  32.00  1.54  1.54      348.       212.       560.     3.85     2.35     6.20
   0.626    0.382    1.008       3.412       0.010         0.578         0.158
  VACAVATOLBU0332092020210 01                BA2: 5.2 0.41  1.10  4.65    71.   0.
  32.00  1.54  1.54      247.       150.       397.     2.74     1.67     4.41
   0.559    0.341    0.899       2.425       0.010         0.411         0.112
  VACANCTSBBU0631102020110 01                BA2: 5.2 0.37  1.10  3.31    78.   0.
  32.00  1.54  1.54      271.       165.       436.     2.81     1.71     4.52
   0.525    0.320    0.845       2.487       0.007         0.421         0.115
```

```
  VACANCTSBBU0641102020210 01                BA2: 5.2 0.36  1.10  4.65   106.   0.
  32.00  1.54  1.54      369.       225.       593.     3.81     2.32     6.14
   0.679    0.414    1.093       3.376       0.014         0.572         0.156
  VACA  TSCBU0631102020110 01                BA2: 5.2 0.43  1.10  3.31   170.   0.
  32.00  1.54  1.54      591.       469.      1060.     6.12     4.86    10.98
   1.322    1.050    2.372       6.040       0.018         1.023         0.279
  VACASCTSEBU0641102020110 01                BA2: 5.2 0.33  1.10  3.31   250.   0.
  32.00  1.54  1.54     1038.       690.      1728.    10.48     6.97    17.45
   1.740    1.157    2.897       9.598       0.029         1.625         0.443
  VACASCTSEBU0641102020310 01                BA2: 5.2 0.40  1.10  0.57   432.   0.
  32.00  1.54  1.54     1793.      1424.      3217.    17.45    13.86    31.31
   3.464    2.751    6.215      17.220       0.009         2.916         0.795
  VACANCTSGBU0641102020210 01                BA2: 5.2 0.36  1.10  4.65   526.   0.
  32.00  1.54  1.54     1829.      1452.      3281.    18.37    14.59    32.96
   3.298    2.619    5.917      18.130       0.077         3.070         0.837
  VACANCTSGBU0642102020110 01                BA2: 5.2 0.34  1.10  3.31   142.   0.
  32.00  1.54  1.54      494.       301.       795.     5.30     3.23     8.53
   0.901    0.549    1.449       4.689       0.014         0.794         0.217
  VACA  TSHBU0631102020110 01                BA2: 5.2 0.37  1.10  3.31   250.   0.
  32.00  1.54  1.54      869.       690.      1559.     8.73     6.93    15.66
   1.610    1.279    2.889       8.611       0.026         1.458         0.398
  VACA  TSHBU0641102020110 01                BA2: 5.2 0.35  1.10  3.31   174.   0.
  32.00  1.54  1.54      722.       574.      1296.     7.03     5.59    12.62
   1.224    0.972    2.195       6.939       0.021         1.175         0.320
  VACA  TSHBU0641102020210 01                BA2: 5.2 0.36  1.10  4.65   170.   0.
  32.00  1.54  1.54      591.       469.      1060.     5.91     4.69    10.60
   1.070    0.850    1.919       5.832       0.025         0.987         0.269
  VACANCTSKBU0632102020210 01                BA2: 5.2 0.38  1.10  4.65   322.   0.
  32.00  1.54  1.54      859.       682.      1541.    10.10     8.02    18.11
   1.928    1.531    3.460       9.963       0.042         1.687         0.460
  VACANCTSKBU0641102020210 01                BA2: 5.2 0.40  1.10  4.65   266.   0.
  32.00  1.54  1.54      925.       564.      1488.     9.52     5.80    15.32
   1.890    1.152    3.041       8.426       0.036         1.427         0.389
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  VACA  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   701.   0.
 137.70  0.51  0.51     3294.      2489.      5783.    33.48    25.30    58.77
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   854.   0.
 147.10  0.66  0.66     3789.      2885.      6674.    39.45    30.03    69.48
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   854.   0.
 147.10  0.66  0.66     4344.      2734.      7079.    44.81    28.21    73.02
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   909.   0.
 134.20  0.46  0.46     4277.      3044.      7321.    43.06    30.65    73.71
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00                NUC      0.00  0.00  0.00   915.   0.
 132.10  0.42  0.42     4540.      3232.      7772.    45.48    32.38    77.85
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00                NUC      0.00  0.00  0.00   904.   0.
 132.10  0.42  0.42     4259.      3316.      7575.    44.58    34.72    79.30
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1140.   0.
 133.40  0.47  0.47     5489.      4006.      9496.    55.36    40.40    95.75
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1210.   0.
 141.60  0.49  0.49     5625.      4439.     10063.    58.91    46.49   105.40
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1210.   0.
 141.60  0.49  0.49     5868.      4079.      9947.    60.08    41.76   101.84
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   854.   0.
 147.10  0.66  0.66     2830.      3136.      5966.    29.29    32.46    61.75
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   891.   0.
 134.20  0.46  0.46     3496.      3268.      6764.    35.19    32.91    68.10
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   940.   0.
  99.90  0.53  0.53     3600.      3448.      7049.    36.45    34.91    71.35
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1140.   0.
  83.40  0.47  0.47     5059.      3927.      8986.    51.30    39.82    91.11
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   976.   0.
 137.80  0.51  0.51     3715.      3541.      7256.    39.90    38.03    77.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1033.   0.
 118.60  0.35  0.35     5133.      2951.      8085.    51.59    29.66    81.25
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1024.   0.
 118.60  0.35  0.35     4212.      3756.      7968.    42.33    37.75    80.08
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  VACA  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  3799.   0.
  15.20  0.00  0.00     6437.      3139.      9575.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  VACA  CC   0622   000000 00              GAS      0.02  0.00  0.00   450.   0.
  13.90  1.03  1.03      907.       696.      1603.     6.80     5.22    12.02
   0.068    0.052    0.120       0.000       0.000         0.638         0.174
  VACANCCC   0613   000000 00              GAS      0.10  0.00  0.00    84.   0.
  19.90  1.03  1.03       19.        43.        62.     0.21     0.48     0.69
   0.011    0.024    0.035       0.000       0.000         0.037         0.010
  VACANCCC   0622   000000 00              GAS      0.02  0.00  0.00   940.   0.
  13.90  1.03  1.03     2149.      1454.      3603.    16.12    10.90    27.02
   0.161    0.109    0.270       0.000       0.000         1.434         0.391
  VACANCCC   0623   000000 00              GAS      0.10  0.00  0.00    68.   0.
  14.90  0.00  1.03        0.        12.        12.     0.00     0.13     0.13
   0.000    0.007    0.007       0.000       0.000         0.007         0.002
  VACANCCC   0624   000000 00              GAS      0.10  0.00  0.00   161.   0.
  19.90  0.00  1.03        0.        14.        14.     0.00     0.17     0.17
   0.000    0.009    0.009       0.000       0.000         0.009         0.003
  VACAVACC   0322   000000 00              GAS      0.08  0.00  0.00  2336.   0.
  13.90  1.03  1.03     1570.      3613.      5183.    12.68    29.18    41.86
   0.488    1.123    1.612       0.000       0.000         2.221         0.606
  VACAVACC   0323   000000 00              GAS      0.12  0.00  0.00   594.   0.
  13.90  0.00  1.03        0.       102.       102.     0.00     1.13     1.13
   0.000    0.067    0.067       0.000       0.000         0.060         0.016
  VACANCCC   6     (b)                     GAS      0.02  0.00  0.00  1750.  66.
  11.70  1.95  1.95     6035.      2613.      8648.    42.59    18.44    61.02
   0.426    0.184    0.610       0.000       0.000         3.238         0.883
IGCC                           10
Turbine                        11
  VACA  CT   0612   000000 00              GAS      0.10  0.00  0.00    22.   0.
   2.80  0.00  1.03        0.         4.         4.     0.00     0.04     0.04
   0.000    0.002    0.002       0.000       0.000         0.002         0.001
  VACA  CT   0622   000000 00              GAS      0.08  0.00  0.00  1934.   0.
   2.80  0.00  1.03        0.       333.       333.     0.00     3.65     3.65
   0.000    0.148    0.148       0.000       0.000         0.194         0.053
  VACANCCT   0611   000000 00              GAS      0.10  0.00  0.00     1.   0.
   2.80  1.03  1.03        1.         2.         2.     0.01     0.01     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  VACANCCT   0613   000000 00              GAS      0.13  0.00  0.00    26.   0.
  11.20  0.00  1.03        0.         4.         4.     0.00     0.06     0.06
   0.000    0.004    0.004       0.000       0.000         0.003         0.001
  VACANCCT   0622   000000 00              GAS      0.08  0.00  0.00  3047.   0.
   2.80  1.03  1.03      305.      1075.      1380.     3.33    11.75    15.08
   0.133    0.470    0.603       0.000       0.000         0.801         0.218
```

```
  VACAVACT   0312   000000 00                GAS      0.10  0.00  0.00    28.   0.
   2.80  1.03  1.03        6.        14.        21.     0.06     0.14     0.20
   0.003    0.007    0.010       0.000       0.000         0.011         0.003
  VACAVACT   0313   000000 00                GAS      0.10  0.00  0.00     3.   0.
   7.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACAVACT   0322   000000 00                GAS      0.09  0.00  0.00  1647.   0.
   2.80  0.00  1.03        0.       284.       284.     0.00     3.17     3.17
   0.000    0.140    0.140       0.000       0.000         0.168         0.046
  VACA  ACT  1     (b)                       GAS      0.10  0.00  0.00  2130.  51.
   7.80  2.94  2.94      499.      1081.      1580.     4.27     9.24    13.51
   0.213    0.462    0.676       0.000       0.000         0.717         0.196
  VACANCACT  6     (b)                       GAS      0.10  0.00  0.00   929.  51.
   7.80  2.94  2.94      654.      1019.      1673.     5.59     8.72    14.30
   0.279    0.436    0.715       0.000       0.000         0.759         0.207
Biomass                          12
  VACA  BIOMS00  50 000000 00                B1-: 0.6 0.02  0.08  0.57    47.   0.
  44.80  5.36  5.36      204.       157.       361.     1.88     1.45     3.33
   0.019    0.015    0.033       0.133       0.001         0.000         0.000
Geothermal                       13
Landfill Gas                     14
  VACA  LFGAS00     000000 00                WASTE    0.25  0.00  0.00    25.   0.
  78.60 10.48 10.48      112.        85.       197.     1.53     1.16     2.69
   0.188    0.143    0.331       0.000       0.000         0.000         0.000
Wind                             15
  VACA  WIND 00     000000 00                NONE     0.00  0.00 71.00    14.   0.
  26.40  0.00  0.00       20.        11.        31.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                        16
Solar                            17
Non Fossil_Other                 18
  VACA  OTHER00     000000 00                NONE     0.00  0.00 71.00   140.   0.
 103.60  0.00  0.00      617.       487.      1104.     6.79     5.35    12.14
   0.000    0.000    0.000       0.000       0.431         0.000         0.000
Fossil_Other                     19
Pump Storage                     20
  VACA  PUMPS00     000000 00                NONE     0.00  0.00 71.00  4295.   0.
   6.50  0.00  0.00     1953.      1410.      3363.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                     21
Cgn_Coal                         22
  VACA  CGCOU0631102050710 01                BA2: 5.2 0.35  1.10  5.17    35.   0.
  11.70  1.54  1.54      142.       114.       256.     1.14     0.92     2.05
   0.200    0.161    0.361       1.129       0.005         0.191         0.052
  VACANCCGCOU0611102050310 01                BA2: 5.2 0.39  1.10  0.57    65.   0.
  22.40  1.54  1.54      263.       212.       475.     2.34     1.89     4.23
   0.451    0.364    0.814       2.327       0.001         0.394         0.107
  VACANCCGCOU0611102050710 01                BA2: 5.2 0.39  1.10  5.17    21.   0.
  28.70  1.54  1.54       85.        69.       154.     0.78     0.63     1.41
   0.150    0.121    0.271       0.776       0.004         0.131         0.036
  VACANCCGCOU0631102050310 01                BA2: 5.2 0.39  1.10  0.57   135.   0.
  17.40  1.54  1.54      546.       441.       987.     4.86     3.92     8.79
   0.936    0.755    1.692       4.833       0.002         0.818         0.223
  VACANCCGCOU0631102050710 01                BA2: 5.2 0.39  1.10  5.17   161.   0.
  13.60  1.54  1.54      652.       526.      1178.     5.80     4.68    10.48
   1.116    0.901    2.017       5.764       0.027         0.976         0.266
  VACAVACGCOU0311092050310 01                BA2: 5.2 0.38  1.10  0.57    49.   0.
  17.40  1.54  1.54      198.       160.       358.     1.77     1.42     3.19
   0.333    0.269    0.601       1.754       0.001         0.297         0.081
  VACAVACGCOU0331092050710 01                BA2: 5.2 0.38  1.10  5.17   363.   0.
  11.70  1.54  1.54     1469.      1186.      2655.    11.93     9.63    21.57
   2.250    1.816    4.065      11.861       0.056         2.008         0.548
  VACAVACGCOS0331092050304 01                BE2:10.4 0.38  0.22  4.18    78.   0.
  35.60  2.94  2.94      316.       255.       571.     2.81     2.27     5.08
   0.530    0.427    0.957       0.559       0.011         0.473         0.129
```

```
  VACANCCGCOD0631102050308 01              BD1: 5.1 0.25  0.36  2.03    52.   0.
  23.30  3.84  3.84      210.       170.       380.     2.06     1.66     3.72
   0.257    0.207    0.464       0.669       0.004         0.346         0.094
Cgn_Gas                        23
  VACANCCGCT 0612   000000 00              GAS      0.11  0.00  0.00     2.   0.
   2.80  1.03  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  VACAVACGCT 0311   000000 00              GAS      0.11  0.00  0.00     7.   0.
   2.80  1.03  1.03        5.        11.        16.     0.04     0.09     0.13
   0.002    0.005    0.008       0.000       0.000         0.007         0.002
  VACAVACGCT 0312   000000 00              GAS      0.11  0.00  0.00    11.   0.
   2.80  1.03  1.03        3.         6.         8.     0.03     0.06     0.09
   0.002    0.003    0.005       0.000       0.000         0.005         0.001
  VACA  CGCC 0622   000000 00              GAS      0.02  0.00  0.00  1000.   0.
  13.90  1.03  1.03     2016.      1547.      3563.    15.12    11.60    26.72
   0.151    0.116    0.267       0.000       0.000         1.418         0.387
  VACA  CGCC 0623   000000 00              GAS      0.11  0.00  0.00   111.   0.
  13.90  1.03  1.03       25.        57.        82.     0.25     0.56     0.81
   0.013    0.030    0.043       0.000       0.000         0.043         0.012
  VACANCCGCC 0623   000000 00              GAS      0.11  0.00  0.00   162.   0.
  13.90  1.03  1.03       36.        83.       120.     0.36     0.83     1.19
   0.020    0.045    0.065       0.000       0.000         0.063         0.017
  VACAVACGCC 0322   000000 00              GAS      0.12  0.00  0.00   288.   0.
  13.90  1.03  1.03      968.       445.      1414.     6.94     3.20    10.14
   0.413    0.190    0.603       0.000       0.000         0.538         0.147
  VACAVACGCC 0323   000000 00              GAS      0.12  0.00  0.00    91.   0.
  13.90  1.03  1.03       20.        47.        67.     0.21     0.48     0.68
   0.012    0.028    0.041       0.000       0.000         0.036         0.010
Cgn_Oil                        24
Cgn_Other                      25
  VACA  CGBIO00  50 000000 00              B1-: 0.6 0.02  0.08  0.57    34.   0.
  44.80  5.36  5.36      147.       114.       261.     1.26     0.97     2.23
   0.013    0.010    0.022       0.089       0.001         0.000         0.000
  VACA  CGOTH00     000000 00              NONE     0.00  0.00 71.00    10.   0.
 103.60  0.00  0.00       43.        33.        77.     0.18     0.14     0.32
   0.000    0.000    0.000       0.000       0.011         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
  VACANCTSABC0641101020201 01     ML02     BD1: 5.1 0.06  0.06  0.51   685.  27.
  33.49  3.47  3.47     2844.      2259.      5103.    27.50    21.84    49.34
   0.811    0.644    1.456       1.480       0.013         4.595         1.253
  VACANCTSDBC0641101020101 01     LO02     BG1: 8.0 0.06  0.25  0.80  1086.  20.
  34.18  3.83  3.83     4508.      3580.      8088.    41.52    32.97    74.49
   1.142    0.907    2.049       9.312       0.030         6.937         1.892
  VACANCTSDBC0641101020101 01     LD02     BD1: 5.1 0.06  0.15  3.24  1107.  15.
  31.08  4.35  4.35     4593.      3648.      8241.    42.30    33.60    75.90
   1.163    0.924    2.087       5.693       0.123         7.068         1.928
  VACASCTSEBC0641102020101 01     ML02     BE2:10.4 0.04  0.09  1.04   473.  26.
  37.18  3.49  3.49        0.      1559.      1559.     0.00    15.57    15.57
   0.000    0.343    0.343       0.685       0.008         1.450         0.395
  VACASCTSEBC0641102020101 01     ML02     BE1: 6.1 0.04  0.09  0.61   473.  26.
  37.18  3.49  3.49     1963.         0.      1963.    19.60     0.00    19.60
   0.431    0.000    0.431       0.863       0.006         1.826         0.498
  VACANCTSBBC0641101020101 01     ML02     BD1: 5.1 0.05  0.06  0.51   377.  26.
```

```
  42.80  3.45  3.45     1564.      1242.      2807.    14.80    11.75    26.55
   0.392    0.311    0.704       0.796       0.007         2.472         0.674
  VACANCTSBBC0641102020101 01     ML02     BD1: 5.1 0.05  0.06  0.51   347.  27.
  37.48  3.47  3.47     1438.      1142.      2581.    13.93    11.06    24.99
   0.313    0.249    0.562       0.750       0.006         2.327         0.635
  VACAVATSBBC0341092020101 01     ML02     BF2:11.1 0.01  0.12  1.11  1126.  26.
  39.53  3.47  3.47     4672.      3711.      8383.    44.98    35.72    80.70
   0.225    0.179    0.403       4.842       0.045         7.515         2.050
  VACANCTSGBC0641102020101 01     LO01     BG1: 8.0 0.03  0.25  0.80   550.  23.
  35.58  3.92  3.92     2283.      1814.      4097.    23.14    18.38    41.53
   0.359    0.285    0.644       5.191       0.017         3.867         1.055
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
  VACA  TSCBU0641102020110 01     SCR1     BA2: 5.2 0.05  1.10  3.31   306.  11.
  27.00  2.58  2.58     1270.      1009.      2279.    12.73    10.11    22.84
   0.318    0.253    0.571      12.560       0.038         2.127         0.580
  VACANCTSGBU0641101020110 01     SCR2     BA2: 5.2 0.06  1.10  3.31   165.  11.
  32.60  2.57  2.57      574.       456.      1029.     5.98     4.75    10.72
   0.182    0.145    0.327       5.897       0.018         0.998         0.272
  VACANCTSGBU0642101020110 01     SCR2     BA2: 5.2 0.05  1.10  3.31   165.  11.
  32.60  2.57  2.57      574.       456.      1029.     6.11     4.85    10.96
   0.165    0.131    0.296       6.026       0.018         1.020         0.278
Ret.ExistScrub & SCR          41
  VACA  TSXBS0641101020103 01     SCR2     BD1: 5.1 0.06  0.14  0.51   270.   9.
  41.10  3.90  3.90     1121.       890.      2011.    11.07     8.79    19.86
   0.315    0.251    0.566       1.400       0.005         1.850         0.504
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  VACANCTSBBU0641102020110 01     RL02     BD1: 5.1 0.05  0.06  0.51  1841.  34.
  37.88  3.42  3.42     7639.      6067.     13705.    73.81    58.62   132.43
   1.845    1.466    3.311       3.973       0.034        12.333         3.363
  VACANCTSDBU0641102020110 01     RL02     BD1: 5.1 0.05  0.06  0.51  2046.  29.
  37.91  3.36  3.36     8492.      6744.     15236.    78.62    62.44   141.06
   1.965    1.561    3.526       4.232       0.036        13.135         3.582
  VACANCTSGBU0641101020210 01     SL01     BE2:10.4 0.05  0.09  1.04   259.  34.
  43.39  3.50  3.50        0.       527.       527.     0.00     5.37     5.37
   0.000    0.140    0.140       0.236       0.003         0.500         0.136
  VACANCTSGBU0641101020210 01     SL01     BE1: 6.1 0.05  0.09  0.61   259.  34.
  43.39  3.50  3.50        0.       328.       328.     0.00     3.34     3.34
   0.000    0.087    0.087       0.147       0.001         0.311         0.085
  VACANCTSGBU0641101020210 01     SL01     BD1: 5.1 0.05  0.06  0.51   259.  34.
  43.39  3.50  3.50     1077.         0.      1077.    10.96     0.00    10.96
   0.285    0.000    0.285       0.329       0.003         1.021         0.278
  VACANCTSABU0641102020210 01     ML02SCR1 BD1: 5.1 0.05  0.06  0.51   729.  35.
  33.08  3.43  3.43     3027.      2404.      5431.    29.53    23.46    52.99
   0.738    0.586    1.325       1.590       0.013         4.935         1.346
  VACANCTSGBU0641102020110 01     ML02SCR1 BE2:10.4 0.05  0.09  1.04   269.  36.
  44.29  3.49  3.49     1117.       692.      1809.    11.21     6.94    18.16
   0.280    0.174    0.454       0.799       0.009         1.691         0.461
  VACANCTSGBU0641102020110 01     ML02SCR1 BD1: 5.1 0.05  0.06  0.51   269.  36.
  44.29  3.49  3.49        0.       195.       195.     0.00     1.96     1.96
   0.000    0.049    0.049       0.059       0.000         0.183         0.050
  VACAVACGCOU0341092050710 01     ML01SCR1 BF2:11.1 0.05  0.12  1.11   195.  40.
  24.15  3.56  3.56      789.       636.      1425.     8.22     6.63    14.85
   0.205    0.166    0.371       0.891       0.008         1.383         0.377
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
```

```
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: TVA      (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
  TVA KYTSYBA0641201010105 01              BG1: 8.0 0.09  0.25  0.80  1192.   0.
  43.50  3.91  3.91     4947.      3929.      8876.    49.20    39.08    88.28
   2.140    1.700    3.840      11.035       0.035         8.221         2.242
  TVA   TSXBA0641221020105 01              BG1: 8.0 0.06  0.25  0.80  2448.   0.
  43.30  3.91  3.91    10160.      8069.     18229.    98.79    78.46   177.25
   2.816    2.236    5.052      22.157       0.071        16.506         4.502
  TVA   TSXBA0641222020105 01              BG1: 8.0 0.04  0.25  0.80   477.   0.
  43.50  3.91  3.91     1980.      1572.      3552.    19.48    15.47    34.96
   0.370    0.294    0.664       4.370       0.014         3.255         0.888
  TVA   TSXBA0641222020705 01              BG1: 8.0 0.04  0.25  0.80   467.   0.
  43.50  3.91  3.91     1938.      1539.      3477.    19.19    15.24    34.42
   0.345    0.274    0.620       4.303       0.014         3.206         0.874
  TVA MSTCOLA1641242020105 01              BG1: 8.0 0.11  0.25  0.80   440.   0.
  23.60  3.91  3.91     1826.      1450.      3276.    16.43    13.05    29.49
   0.904    0.718    1.622       3.686       0.012         2.746         0.749
  TVA KYTSEBA0641201010105 01              BG1: 8.0 0.10  0.25  0.80   977.   0.
  43.30  3.91  3.91     4055.      3220.      7275.    40.83    32.43    73.27
   1.960    1.557    3.517       9.158       0.029         6.823         1.861
Scrubbed Coal                  2
```

```
Unscrubbed Coal_NOx             3
  TVA   TSEBC0641221010101 01              BB2: 4.1 0.09  1.00  2.62   744.   0.
  32.50  2.51  2.51     3088.      2452.      5540.    29.85    23.70    53.55
   1.313    1.043    2.356      26.775       0.070         4.987         1.360
  TVA   TSCBC0641212020201 01              BA2: 5.2 0.04  1.10  4.65  1434.   0.
  32.60  2.51  2.51     5951.      4727.     10678.    58.15    46.18   104.33
   1.047    0.831    1.878      57.384       0.243         9.716         2.650
Unscrubbed Coal                 4
  TVA   TSABU0641202020310 01              BB2: 4.1 0.39  1.00  0.45  1206.   0.
  32.00  1.54  1.54     5005.      3975.      8980.    50.44    40.06    90.49
   9.860    7.831   17.692      45.247       0.020         8.427         2.298
  TVA   TSCBU0641212020210 01              BA2: 5.2 0.39  1.10  4.65   704.   0.
  32.00  1.54  1.54     2922.      2320.      5242.    27.80    22.08    49.87
   5.420    4.305    9.725      27.431       0.116         4.644         1.267
  TVA   TSDBU0642222020210 01              BB1: 3.4 0.31  1.00  3.07   642.   0.
  32.00  1.54  1.54     2232.      1773.      4004.    25.50    20.26    45.76
   3.953    3.140    7.093      22.879       0.070         4.261         1.162
  TVA   TSGBU0641222020110 01              BB2: 4.1 0.37  1.00  2.62   222.   0.
  32.00  1.54  1.54      921.       732.      1653.     9.75     7.75    17.50
   1.819    1.445    3.263       8.749       0.023         1.629         0.444
  TVA   TSGBU0642222020110 01              BB2: 4.1 0.38  1.00  2.62   444.   0.
  32.00  1.54  1.54     1843.      1463.      3306.    20.05    15.92    35.97
   3.769    2.993    6.763      17.985       0.047         3.350         0.914
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  2429.   0.
 109.50  0.32  0.32     9520.      8866.     18386.    99.29    92.47   191.76
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1244.   0.
 109.50  0.32  0.32     6153.      4353.     10506.    64.17    45.40   109.58
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1252.   0.
 133.70  0.37  0.37     6187.      4372.     10559.    62.94    44.47   107.41
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1144.   0.
  99.20  0.57  0.57     5772.      3709.      9482.    62.00    39.84   101.83
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1259.   0.
 133.70  0.37  0.37     5219.      4401.      9620.    53.09    44.77    97.85
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  TVA   HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  3934.   0.
  15.40  0.00  0.00    11469.      6255.     17724.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  TVA   CC   0622   000000 00              GAS      0.02  0.00  0.00    79.   0.
  13.90  1.03  1.03      266.       204.       469.     1.99     1.53     3.52
   0.020    0.015    0.035       0.000       0.000         0.187         0.051
  TVA MSCC   1622   000000 00              GAS      0.02  0.00  0.00  2500.   0.
  13.90  1.03  1.03     6505.      5473.     11978.    48.79    41.05    89.84
   0.488    0.410    0.898       0.000       0.000         4.768         1.300
IGCC                           10
Turbine                        11
  TVA   CT   0612   000000 00              GAS      0.08  0.00  0.00     4.   0.
   2.80  0.00  1.03        0.         2.         2.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  TVA   CT   0622   000000 00              GAS      0.08  0.00  0.00  3741.   0.
   2.90  0.00  1.03        0.       432.       432.     0.00     4.74     4.74
   0.000    0.194    0.194       0.000       0.000         0.252         0.069
  TVA MSCT   1612   000000 00              GAS      0.08  0.00  0.00    20.   0.
   2.80  0.00  1.03        0.        10.        10.     0.00     0.11     0.11
   0.000    0.005    0.005       0.000       0.000         0.006         0.002
  TVA MSCT   1622   000000 00              GAS      0.08  0.00  0.00  1903.   0.
   2.80  0.00  1.03        0.       652.       652.     0.00     7.12     7.12
```

```
   0.000    0.285    0.285       0.000       0.000         0.378         0.103
Biomass                          12
  TVA   BIOMS00  50 000000 00              B1-: 0.6 0.02  0.08  0.57     1.   0.
  44.80  5.36  5.36        4.         3.         8.     0.04     0.03     0.07
   0.000    0.000    0.001       0.003       0.000         0.000         0.000
Geothermal                       13
Landfill Gas                     14
  TVA   LFGAS00     000000 00              WASTE    0.25  0.00  0.00     2.   0.
  78.60 10.48 10.48        9.         7.        16.     0.12     0.09     0.22
   0.015    0.011    0.026       0.000       0.000         0.000         0.000
Wind                             15
  TVA   WIND 00     000000 00              NONE     0.00  0.00 71.00     2.   0.
  26.40  0.00  0.00        2.         1.         3.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                        16
Solar                            17
Non Fossil_Other                 18
  TVA   OTHER00     000000 00              NONE     0.00  0.00  0.00    12.   0.
 103.60  0.00  0.00       53.        42.        95.     0.58     0.46     1.04
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                     19
Pump Storage                     20
  TVA   PUMPS00     000000 00              NONE     0.00  0.00 71.00  1532.   0.
   6.50  0.00  0.00      316.       687.      1003.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                     21
Cgn_Coal                         22
Cgn_Gas                          23
  TVA   CGCT 0622   000000 00              GAS      0.08  0.00  0.00   308.   0.
   2.80  0.00  1.03        0.        53.        53.     0.00     0.58     0.58
   0.000    0.023    0.023       0.000       0.000         0.031         0.008
  TVA   CGCC 0622   000000 00              GAS      0.02  0.00  0.00  1290.   0.
  13.90  1.03  1.03     2601.      1995.      4596.    19.51    14.96    34.47
   0.195    0.150    0.345       0.000       0.000         1.829         0.499
Cgn_Oil                          24
Cgn_Other                        25
NonCG IPP_Coal                   26
NonCG IPP_Gas                    27
NonCG IPP_Other                  28
Blr_Coal                         29
Blr_Gas                          30
Blr_Oil                          31
Blr_Other                        32
SteamOnly Cogen                  33
Rep.Coal-CC                      34
Rep.O/G-CC                       35
Rep.Coal-IGCC                    36
Ret.Scrubber                     37
Ret.ExistSCR & Scrub             38
  TVA   TSCBC0641212020101 01     LO01     BG1: 8.0 0.04  0.25  0.80   861.  18.
  39.90  3.81  3.81     3571.      2836.      6408.    32.46    25.78    58.25
   0.601    0.477    1.078       7.281       0.023         5.424         1.479
  TVA   TSLSC0641222020101 01     LO01     BG1: 8.0 0.05  0.25  0.80   457.  25.
  41.90  3.92  3.92     1897.      1507.      3404.    19.20    15.25    34.46
   0.432    0.343    0.775       4.307       0.014         3.209         0.875
Ret.ExistSNCR & Scrub            39
Ret.SCR                          40
  TVA   TSDBU0641222020110 01     SCR1     BB2: 4.1 0.05  1.00  2.62   564.  12.
  32.60  2.59  2.59     2341.      1859.      4200.    24.52    19.48    44.00
   0.613    0.487    1.100      21.998       0.058         4.097         1.117
Ret.ExistScrub & SCR             41
  TVA   TSWBS0642202030303 01     SCR1     BG1: 8.0 0.05  0.60  0.40   124.  12.
  23.80  4.01  4.01      515.       409.       923.     5.48     4.35     9.83
   0.137    0.109    0.246       2.950       0.002         0.916         0.250
Ret.SNCR                         42
```

```
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  TVA   TSLSU0641222020110 01     RL01     BF1: 6.8 0.05  0.12  0.68   697.  42.
  45.49  3.58  3.58     2893.      2298.      5190.    30.21    23.99    54.20
   0.755    0.600    1.355       3.252       0.019         5.047         1.376
  TVA   TSBBU0641212020110 01     ML01SCR1 BD1: 5.1 0.05  0.06  0.51   956.  35.
  43.69  3.49  3.49     3966.      3150.      7115.    38.64    30.69    69.33
   0.966    0.767    1.733       2.080       0.018         6.456         1.761
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: SOU      (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  SOU   TSXBS0642112020103 01              BD1: 5.1 0.34  0.06  1.72   102.   0.
```

```
  43.00  2.94  2.94      423.       336.       760.     4.90     3.90     8.80
   0.839    0.666    1.505       0.271       0.008         0.820         0.224
Unscrubbed Coal_NOx            3
  SOU ALTSABC0641232020101 01              BB2: 4.1 0.03  1.00  2.62  1341.   0.
  12.20  2.51  2.51     5565.      4420.      9985.    52.53    41.72    94.24
   0.867    0.688    1.555      47.121       0.124         8.776         2.393
Unscrubbed Coal                4
  SOU ALTSABU0641232020210 01              BB1: 3.4 0.33  1.00  3.07   669.   0.
  22.40  1.54  1.54     2776.      2205.      4982.    26.20    20.81    47.02
   4.363    3.465    7.828      23.508       0.072         4.378         1.194
  SOU MSTSABU1641242020110 01              BB2: 4.1 0.29  1.00  2.62   536.   0.
  26.40  1.54  1.54     2224.      1767.      3991.    22.45    17.83    40.28
   3.300    2.621    5.920      20.138       0.053         3.751         1.023
  SOU   TSBBU0632112020110 01              BA2: 5.2 0.35  1.10  3.31   107.   0.
  32.00  1.54  1.54      199.       227.       426.     2.20     2.51     4.71
   0.383    0.437    0.820       2.593       0.008         0.439         0.120
  SOU   TSBBU0641112020110 01              BA2: 5.2 0.38  1.10  3.31   282.   0.
  26.20  1.54  1.54      980.       779.      1759.     9.91     7.87    17.78
   1.868    1.484    3.351       9.779       0.029         1.656         0.452
  SOU   TSBBU0641242020210 01              BB1: 3.4 0.38  1.00  3.07   534.   0.
  32.00  1.54  1.54     2216.      1760.      3976.    21.67    17.21    38.88
   4.150    3.296    7.446      19.440       0.060         3.621         0.987
  SOU ALTSEBU0632232020110 01              BD1: 5.1 0.36  1.50  3.24   135.   0.
  32.00  1.54  1.54        0.       286.       286.     0.00     3.37     3.37
   0.000    0.608    0.608       2.524       0.005         0.313         0.085
  SOU ALTSEBU0632232020110 01              BA1: 3.7 0.36  1.10  2.36   135.   0.
  32.00  1.54  1.54      360.         0.       360.     4.24     0.00     4.24
   0.765    0.000    0.765       2.331       0.005         0.395         0.108
  SOU ALTSEBU0641232020210 01              BA1: 3.7 0.36  1.10  3.32   857.   0.
  32.00  1.54  1.54     3557.      2825.      6381.    34.20    27.17    61.37
   6.106    4.849   10.955      33.754       0.102         5.715         1.559
  SOU ALTSEBU0642232020110 01              BD1: 5.1 0.40  1.50  3.24   224.   0.
  32.00  1.54  1.54        0.        83.        83.     0.00     0.92     0.92
   0.000    0.182    0.182       0.691       0.001         0.086         0.023
  SOU ALTSEBU0642232020110 01              BA1: 3.7 0.40  1.10  2.36   224.   0.
  32.00  1.54  1.54      779.       535.      1314.     8.63     5.93    14.56
   1.704    1.172    2.876       8.008       0.017         1.356         0.370
  SOU   TSFBU0641112020110 01              BA2: 5.2 0.36  1.10  3.31  1674.   0.
  29.70  1.54  1.54     5820.      4622.     10442.    58.34    46.34   104.68
  10.501    8.340   18.842      57.572       0.173         9.748         2.658
  SOU   TSFBU0642112020110 01              BA2: 5.2 0.37  1.10  3.31   320.   0.
  32.00  0.00  1.54        0.       678.       678.     0.00     7.68     7.68
   0.000    1.431    1.431       4.222       0.013         0.715         0.195
  SOU   TSHBU0632222020210 01              BB1: 3.4 0.35  1.00  3.07    80.   0.
  26.40  1.54  1.54      332.       264.       596.     3.77     3.00     6.77
   0.656    0.521    1.177       3.384       0.010         0.630         0.172
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  SOU   NUKE 00    7000000 00              NUC      0.00  0.00  0.00   865.   0.
 149.60  0.69  0.69     4060.      2963.      7024.    44.23    32.28    76.51
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1263.   0.
  78.50  0.38  0.38     6269.      4322.     10591.    68.16    47.00   115.16
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1264.   0.
  78.50  0.38  0.38     6097.      4637.     10734.    66.30    50.42   116.71
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00              NUC      0.00  0.00  0.00   851.   0.
 150.80  0.65  0.65     3124.      2831.      5956.    34.37    31.14    65.51
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00              NUC      0.00  0.00  0.00   860.   0.
 150.80  0.65  0.65     3623.      3155.      6777.    39.85    34.70    74.55
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00              NUC      0.00  0.00  0.00   879.   0.
```

```
 149.60  0.69  0.69     3933.      2979.      6912.    43.19    32.72    75.91
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  SOU   HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  3305.   0.
  14.90  0.00  0.00     6138.      2706.      8844.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  SOU   CC   0612   000000 00              GAS      0.02  0.00  0.00    27.   0.
  13.90  1.03  1.03      121.        93.       214.     0.91     0.70     1.60
   0.009    0.007    0.016       0.000       0.000         0.085         0.023
  SOU   CC   0613   000000 00              GAS      0.10  0.00  0.00    43.   0.
  19.90  1.03  1.03       10.        22.        32.     0.11     0.25     0.35
   0.005    0.013    0.018       0.000       0.000         0.019         0.005
  SOU   CC   0622   000000 00              GAS      0.02  0.00  0.00 10500.   0.
  13.90  1.03  1.03    45340.     31226.     76566.   340.51   234.51   575.01
   3.575    2.462    6.038       0.000       0.000        30.516         8.323
  SOU FLCC   1522   000000 00              GAS      0.02  0.00  0.00   500.   0.
  13.90  1.03  1.03     2241.      1719.      3960.    16.81    12.89    29.70
   0.168    0.129    0.297       0.000       0.000         1.576         0.430
  SOU MSCC   1622   000000 00              GAS      0.02  0.00  0.00  1000.   0.
  13.90  1.03  1.03     4482.      3438.      7920.    33.61    25.78    59.40
   0.336    0.258    0.594       0.000       0.000         3.152         0.860
  SOU   CC   8     (b)                     GAS      0.02  0.00  0.00   169.  66.
  11.70  1.95  1.95      777.       561.      1338.     5.49     3.96     9.44
   0.055    0.040    0.094       0.000       0.000         0.501         0.137
IGCC                           10
Turbine                        11
  SOU   CT   0611   000000 00              GAS      0.10  0.00  0.00     3.   0.
   7.80  1.03  1.03        2.         5.         7.     0.02     0.04     0.06
   0.001    0.002    0.003       0.000       0.000         0.003         0.001
  SOU   CT   0613   000000 00              GAS      0.13  0.00  0.00     3.   0.
  11.20  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   CT   0622   000000 00              GAS      0.08  0.00  0.00  7042.   0.
   2.80  1.03  1.03      109.      3645.      3754.     1.19    39.78    40.97
   0.048    1.591    1.639       0.000       0.000         2.174         0.593
  SOU MSCT   1622   000000 00              GAS      0.08  0.00  0.00   640.   0.
   2.80  0.00  1.03        0.       331.       331.     0.00     3.62     3.62
   0.000    0.145    0.145       0.000       0.000         0.192         0.052
  SOU   ACT  8     (b)                     GAS      0.10  0.00  0.00  1110.  51.
   7.80  2.94  2.94      263.      1691.      1955.     2.25    14.46    16.71
   0.113    0.723    0.836       0.000       0.000         0.887         0.242
Biomass                        12
Geothermal                     13
Landfill Gas                   14
  SOU   LFGAS00     000000 00              WASTE    0.25  0.00  0.00     9.   0.
  78.60 10.48 10.48       40.        31.        71.     0.55     0.42     0.97
   0.068    0.052    0.119       0.000       0.000         0.000         0.000
Wind                           15
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
Fossil_Other                   19
Pump Storage                   20
  SOU   PUMPS00     000000 00              NONE     0.00  0.00 71.00  1416.   0.
   6.50  0.00  0.00      292.       635.       927.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
  SOU   CGCOU0611112050710 01              BA2: 5.2 0.40  1.10  5.17     1.   0.
  14.60  1.54  1.54        4.         3.         7.     0.04     0.03     0.07
   0.007    0.006    0.013       0.036       0.000         0.006         0.002
Cgn_Gas                        23
  SOU   CGCT 0612   000000 00              GAS      0.10  0.00  0.00     4.   0.
   8.80  1.03  1.03        1.         6.         7.     0.01     0.06     0.07
```

```
   0.000    0.003    0.004       0.000       0.000         0.004         0.001
  SOU MSCGCT 1622   000000 00              GAS      0.05  0.00  0.00    70.   0.
   2.80  1.03  1.03       16.       109.       125.     0.16     1.07     1.23
   0.004    0.025    0.029       0.000       0.000         0.065         0.018
  SOU   CGCC 0612   000000 00              GAS      0.10  0.00  0.00     5.   0.
  13.90  1.03  1.03        3.         8.        11.     0.03     0.07     0.10
   0.002    0.003    0.005       0.000       0.000         0.005         0.001
  SOU   CGCC 0622   000000 00              GAS      0.04  0.00  0.00  1604.   0.
  13.90  1.03  1.03     5392.      3517.      8909.    41.31    26.95    68.25
   0.723    0.472    1.194       0.000       0.000         3.622         0.988
  SOU FLCGCC 1522   000000 00              GAS      0.02  0.00  0.00   240.   0.
  13.90  1.03  1.03     1076.       825.      1901.     8.07     6.19    14.26
   0.081    0.062    0.143       0.000       0.000         0.757         0.206
Cgn_Oil                        24
Cgn_Other                      25
  SOU   CGBIO00  50 000000 00              B1-: 0.6 0.02  0.08  0.57     5.   0.
  44.80  5.36  5.36       22.        17.        38.     0.19     0.14     0.33
   0.002    0.001    0.003       0.013       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
  SOU   TSFBC0641112020101 01     ML02     BD1: 5.1 0.05  0.06  0.51   494.  24.
  36.28  3.51  3.51     2052.      1630.      3681.    21.02    16.70    37.72
   0.473    0.376    0.849       1.131       0.010         3.512         0.958
  SOU   TSHBC0641112020101 01     LO01     BF2:11.1 0.04  0.15  1.11  4844.  19.
  33.76  3.87  3.87    20104.     15967.     36071.   193.52   153.70   347.22
   4.161    3.305    7.465      26.041       0.193        32.334         8.818
  SOU   TSKBC0641232020101 01     LO01     BG1: 8.0 0.04  0.25  0.80   722.  20.
  34.78  3.88  3.88     1260.      2378.      3638.    12.29    23.20    35.49
   0.246    0.464    0.710       4.436       0.014         3.305         0.901
  SOU   TSKBC0641232020101 01     LO01     BF3:18.7 0.04  0.15  1.87   722.  20.
  34.78  3.88  3.88     1735.         0.      1735.    16.92     0.00    16.92
   0.338    0.000    0.338       1.269       0.016         1.576         0.430
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  SOU ALTSABU0641231020210 01     SCR2     BB1: 3.4 0.06  1.00  3.07   670.   7.
  22.80  2.40  2.40     2781.      2208.      4989.    26.24    20.84    47.09
   0.827    0.657    1.483      23.543       0.072         4.385         1.196
  SOU MSTSBBU1641241020110 01     SCR2     BB2: 4.1 0.06  1.00  2.62   512.   7.
  26.80  2.43  2.43     2125.      1688.      3813.    20.95    16.64    37.60
   0.608    0.483    1.090      18.798       0.049         3.501         0.955
  SOU MSTSBBU1641242020110 01     SCR1     BB2: 4.1 0.05  1.00  2.62   262.   9.
  26.90  2.50  2.50     1087.       864.      1951.    10.77     8.55    19.32
   0.269    0.214    0.483       9.660       0.025         1.799         0.491
  SOU   TSCBU0641232020210 01     SCR1     BA1: 3.7 0.05  1.10  3.32  1711.   8.
  29.90  2.46  2.46        0.      1839.      1839.     0.00    17.22    17.22
   0.000    0.430    0.430       9.471       0.029         1.604         0.437
  SOU   TSCBU0641232020210 01     SCR1     BB1: 3.4 0.05  1.00  3.07  1711.   8.
  29.90  2.46  2.46     7100.      3800.     10900.    66.48    35.58   102.06
   1.662    0.889    2.551      51.028       0.157         9.504         2.592
Ret.ExistScrub & SCR           41
  SOU   TSXBS0641222020203 01     SCR1     BG1: 8.0 0.05  0.85  0.80   472.  10.
  41.10  3.92  3.92     1959.      1556.      3515.    20.56    16.33    36.89
   0.514    0.408    0.922      15.771       0.015         3.435         0.937
  SOU MSTSXBS1641291020203 01     SCR2     BD1: 5.1 0.05  0.07  0.51   200.  10.
```

```
  41.20  3.94  3.94      830.       659.      1489.     8.72     6.92    15.64
   0.218    0.173    0.391       0.539       0.004         1.456         0.397
  SOU MSTSXBS1641292020203 01     SCR1     BD1: 5.1 0.05  0.07  0.51   200.  10.
  41.20  3.94  3.94      830.       659.      1489.     8.72     6.92    15.64
   0.218    0.173    0.391       0.539       0.004         1.456         0.397
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  SOU   TSABU0641112020110 01     RL02     BE1: 6.1 0.05  0.09  0.61  1685.  36.
  39.92  3.44  3.44     1033.         0.      1033.    10.07     0.00    10.07
   0.252    0.000    0.252       0.443       0.003         0.938         0.256
  SOU   TSABU0641112020110 01     RL02     BD1: 5.1 0.05  0.06  0.51  1685.  36.
  39.92  3.44  3.44     5959.      5554.     11513.    58.06    54.11   112.17
   1.451    1.353    2.804       3.365       0.028        10.445         2.849
  SOU MSTSABU1641242020210 01     RO01     BG1: 8.0 0.05  0.25  0.80   534.  30.
  31.38  3.83  3.83     2214.      1759.      3973.    22.40    17.79    40.20
   0.560    0.445    1.005       5.024       0.016         3.743         1.021
  SOU   TSCBU0641232020210 01     RL02     BD1: 5.1 0.05  0.06  0.51   189.  34.
  40.13  3.41  3.41      785.       624.      1409.     7.50     5.96    13.47
   0.188    0.149    0.337       0.404       0.003         1.254         0.342
  SOU   TSESU0641111020210 01     SO01     BF2:11.1 0.06  0.15  1.11    84.  25.
  30.08  3.76  3.76      348.       276.       624.     3.42     2.72     6.14
   0.096    0.076    0.172       0.461       0.003         0.572         0.156
  SOU   TSESU0641112020110 01     RO01     BF2:11.1 0.05  0.15  1.11  1652.  25.
  22.11  3.79  3.79     6854.      5444.     12298.    69.60    55.28   124.88
   1.740    1.382    3.122       9.366       0.069        11.629         3.171
  SOU   TSESU0641112020210 01     RO01     BF2:11.1 0.05  0.15  1.11   815.  25.
  30.08  3.77  3.77     3380.      2685.      6065.    33.64    26.72    60.36
   0.841    0.668    1.509       4.527       0.033         5.621         1.533
  SOU   TSBBU0641242020110 01     LO01SCR1 BG1: 8.0 0.05  0.25  0.80  1080.  30.
  35.37  3.78  3.78     4482.      3559.      8041.    43.16    34.28    77.44
   1.079    0.857    1.936       9.680       0.031         7.212         1.967
  SOU   TSESU0641111020210 01     SCR2LO01 BF2:11.1 0.06  0.15  1.11   732.  25.
  30.09  3.76  3.76     3037.      2412.      5449.    29.90    23.75    53.65
   0.837    0.665    1.502       4.024       0.030         4.996         1.363
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
```


(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu

Year: 2015, Region: ENTG (Emissions By Plant)

NOx SO2 MER CO2 Carbon

Generation Trillion
Emission Emission Emission Emission Emission
(lb/MBtu)(lb/TBtu)(MW) $
/KWyr VOM Mill/KWh (GWh) (Btu)
(1000 Tons) (1000 Tons) (Tons) (Mil Tonnes)(Mil Tonnes)
Unit Fuel NOx SO2 MERCURY Cap. Cap
. FO&M WINT. SUMM. WINTER SUMMER Total WINTER SUMMER Total
WINTER SUMMER Total Total Total Total Total Total
Scrubbed Coal_NOx 1
Scrubbed Coal 2
Unscrubbed Coal_NOx 3
ENTGMOTSEBC0541251010101 01 BB2: 4.1 0.07 0.47 2.62 1160. 0.
27.00 2.51 2.51 4814. 3824. 8638. 48.38 38.43 86.81
1.766 1.403 3.169 20.400 0.114 8.084 2.205
Unscrubbed Coal 4
ENTG TCOLU1041292050210 01 BB1: 3.4 0.28 1.00 3.41 550. 0.
22.40 1.54 1.54 2283. 1813. 4095. 23.74 18.85 42.59
3.312 2.630 5.942 21.296 0.073 3.966 1.082
ENTG TSASU1041292020110 01 SB2: 6.5 0.31 0.73 6.29 4252. 0.
22.40 1.54 1.54 12171. 9667. 21838. 124.20 98.64 222.83
19.437 15.437 34.874 81.780 0.700 21.499 5.863
Oil/Gas Steam 5
Oil/Gas Steam_Nox 6
Nuclear 7
ENTG NUKE 00 8000000 00 NUC 0.00 0.00 0.00 1141. 0.
181.60 0.67 0.67 5532. 3951. 9483. 58.30 41.64 99.94
0.000 0.000 0.000 0.000 0.000 0.000 0.000
ENTG NUKE 00 7000000 00 NUC 0.00 0.00 0.00 1376. 0.
154.00 0.53 0.53 6909. 4760. 11669. 77.05 53.07 130.12
0.000 0.000 0.000 0.000 0.000 0.000 0.000
ENTG NUKE 00 7000000 00 NUC 0.00 0.00 0.00 893. 0.
166.00 0.56 0.56 3905. 3184. 7089. 43.26 35.28 78.54
0.000 0.000 0.000 0.000 0.000 0.000 0.000
ENTG NUKE 00 7000000 00 NUC 0.00 0.00 0.00 996. 0.
103.40 0.72 0.72 4398. 3453. 7850. 50.20 39.41 89.60
0.000 0.000 0.000 0.000 0.000 0.000 0.000
ENTG NUKE 00 7000000 00 NUC 0.00 0.00 0.00 945. 0.
166.00 0.56 0.56 3776. 2832. 6608. 43.22 32.41 75.63
0.000 0.000 0.000 0.000 0.000 0.000 0.000
Hydro 8
ENTG HYDRO00 000000 00 HYDRO 0.00 0.00 0.00 336. 0.
14.20 0.00 0.00 646. 474. 1120. 0.00 0.00 0.00
0.000 0.000 0.000 0.000 0.000 0.000 0.000
Comb.Cycle Gas 9
ENTG CC 1022 000000 00 GAS 0.02 0.00 0.00 6669. 0.
13.90 1.03 1.03 15732. 12942. 28674. 117.99 97.06 215.06
1.180 0.971 2.151 0.000 0.000 11.413 3.113
ENTG CC 1023 000000 00 GAS 0.08 0.00 0.00 203. 0.
19.90 0.00 1.03 0. 35. 35. 0.00 0.31 0.31

```
   0.000    0.013    0.013       0.000       0.000         0.017         0.005
  ENTGMSCC   1622   000000 00              GAS      0.02  0.00  0.00  3835.   0.
  13.90  1.03  1.03    12891.      9888.     22779.    96.68    74.16   170.84
   0.967    0.742    1.708       0.000       0.000         9.067         2.473
  ENTGMOCC   0522   000000 00              GAS      0.02  0.00  0.00   225.   0.
  13.90  1.03  1.03       50.       116.       166.     0.38     0.87     1.25
   0.004    0.009    0.012       0.000       0.000         0.066         0.018
  ENTGTXCC   2322   000000 00              GAS      0.02  0.00  0.00   911.   0.
  13.90  1.03  1.03      204.      1409.      1613.     1.53    10.57    12.10
   0.015    0.106    0.121       0.000       0.000         0.642         0.175
IGCC                          10
Turbine                       11
  ENTG  CT   1012   000000 00              GAS      0.08  0.00  0.00    66.   0.
   2.80  0.00  1.03        0.        11.        11.     0.00     0.12     0.12
   0.000    0.005    0.005       0.000       0.000         0.007         0.002
  ENTGMSCT   1622   000000 00              GAS      0.08  0.00  0.00   613.   0.
   2.80  0.00  1.03        0.       106.       106.     0.00     1.15     1.15
   0.000    0.046    0.046       0.000       0.000         0.061         0.017
Biomass                       12
  ENTG  BIOMS00  51 000000 00              B1-: 0.6 0.02  0.08  0.57    10.   0.
  44.80  5.36  5.36       43.        33.        77.     0.40     0.31     0.71
   0.004    0.003    0.007       0.028       0.000         0.000         0.000
Geothermal                    13
Landfill Gas                  14
  ENTG  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     6.   0.
  78.60 10.48 10.48       27.        20.        47.     0.37     0.28     0.65
   0.045    0.034    0.079       0.000       0.000         0.000         0.000
Wind                          15
  ENTG  WIND 00     000000 00              NONE     0.00  0.00 71.00    57.   0.
  26.40  0.00  0.00       57.        32.        88.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
  ENTG  OTHER00     000000 00              NONE     0.00  0.00  0.00    31.   0.
 103.60  0.00  0.00      137.       108.       244.     1.50     1.19     2.69
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                  19
Pump Storage                  20
Int. Imports                  21
Cgn_Coal                      22
Cgn_Gas                       23
  ENTG  CGCT 1012   000000 00              GAS      0.12  0.00  0.00    12.   0.
   2.80  0.00  1.03        0.         2.         2.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  ENTG  CGCT 1022   000000 00              GAS      0.08  0.00  0.00   751.   0.
   2.80  0.00  1.03        0.        74.        74.     0.00     0.81     0.81
   0.000    0.033    0.033       0.000       0.000         0.043         0.012
  ENTGTXCGCT 2712   000000 00              GAS      0.10  0.00  0.00     1.   0.
   2.80  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ENTG  CGCC 1012   000000 00              GAS      0.09  0.00  0.00    52.   0.
  13.90  1.03  1.03       12.        27.        38.     0.09     0.21     0.30
   0.004    0.010    0.014       0.000       0.000         0.016         0.004
  ENTG  CGCC 1013   000000 00              GAS      0.09  0.00  0.00    13.   0.
  14.50  0.00  1.03        0.         2.         2.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  ENTG  CGCC 1022   000000 00              GAS      0.02  0.00  0.00  1891.   0.
  13.90  1.03  1.03     3937.      2115.      6051.    29.52    15.86    45.39
   0.295    0.159    0.454       0.000       0.000         2.409         0.657
  ENTGTXCGCC 1921   000000 00              GAS      0.13  0.00  0.00   440.   0.
  14.90  0.00  1.03        0.        75.        75.     0.00     0.41     0.41
   0.000    0.027    0.027       0.000       0.000         0.022         0.006
  ENTGTXCGCC 1922   000000 00              GAS      0.02  0.00  0.00   353.   0.
  13.90  0.00  1.03        0.       182.       182.     0.00     1.36     1.36
```

```
   0.000    0.014    0.014       0.000       0.000         0.072         0.020
  ENTGTXCGCC 2712   000000 00              GAS      0.02  0.00  0.00    25.   0.
  13.90  1.03  1.03      112.        86.       198.     0.84     0.64     1.48
   0.008    0.006    0.015       0.000       0.000         0.079         0.021
  ENTGTXCGCC 2722   000000 00              GAS      0.02  0.00  0.00   513.   0.
  13.90  1.03  1.03      115.       264.       379.     0.86     1.98     2.84
   0.009    0.020    0.028       0.000       0.000         0.151         0.041
Cgn_Oil                        24
Cgn_Other                      25
  ENTG  CGBIO00  51 000000 00              B1-: 0.6 0.02  0.08  0.57     8.   0.
  44.80  5.36  5.36       35.        27.        61.     0.30     0.23     0.52
   0.003    0.002    0.005       0.021       0.000         0.000         0.000
  ENTG  CGFWT102    000000 00              WASTE    0.42  0.00 20.87   170.   0.
 103.60  0.00  0.00      760.       580.      1340.     4.52     3.44     7.96
   0.939    0.716    1.656       0.000       0.083         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  ENTG  TSASU1041292020110 01     SCR1     SB2: 6.5 0.05  0.73  6.29  1319.   7.
  22.80  2.40  2.40     5475.      4349.      9824.    55.87    44.37   100.24
   1.397    1.109    2.506      36.789       0.315         9.671         2.638
  ENTGMOTSISU0541271010110 01     SCR2     SB2: 6.5 0.06  0.47  6.29   450.  10.
  29.10  2.52  2.52     1868.      1483.      3351.    18.84    14.96    33.81
   0.537    0.426    0.963       7.945       0.106         3.262         0.890
Ret.ExistScrub & SCR           41
  ENTGMOTSISS0541272020103 01     SCR1     SB2: 6.5 0.05  0.22  2.20   670.   7.
  41.00  3.80  3.80     2781.      2208.      4989.    27.95    22.19    50.14
   0.699    0.555    1.254       5.616       0.055         4.837         1.319
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  ENTG  TSASU1042292020110 01     RD01     BD1: 5.1 0.05  0.15  3.24   798.  24.
  27.58  4.55  4.55     3311.      2630.      5941.    36.32    28.85    65.17
   0.908    0.721    1.629       4.888       0.106         6.069         1.655
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
```

```
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: SPPN     (Emissions By Plant)
--------------------------------------------------
```

	NOx			SO2	MER	CO2		Carbon	
	Emission		Generation	Emission	Emission	Trillion Emission (lb/MBtu)	(lb/TBtu)	Emission (MW)	$ /KWyr
	VOM	Mill/KWh	(GWh)	(1000 Tons)	(1000 Tons)	(Tons)	(Btu)	(Mil Tonnes)	(Mil Tonnes)
Unit						Fuel	NOx	SO2 MERCURY	Cap. Cap
.	FO&M	WINT.	SUMM.	WINTER	SUMMER	Total	WINTER	SUMMER	Total
	WINTER	SUMMER	Total	Total	Total	Total	Total		Total
Scrubbed Coal_NOx				1					
SPPNMOTCOLA0541252020105 01						BG1: 8.0	0.01	0.25	0.80
540.	0.	23.60	3.91	3.91	2241.	1780.	4021.	20.17	16.02
36.19	0.111	0.088	0.199	4.524	0.015	3.370	0.919		
SPPNMOTSCSA0541282020306 01						SB2: 6.5	0.03	0.10	4.86
550.	0.	43.30	3.91	3.91	2283.	1813.	4095.	23.55	18.71
42.26	0.353	0.281	0.634	2.113	0.103	4.077	1.112		
Scrubbed Coal				2					
SPPNMOTSUBS0541272020103 01						BD1: 5.1	0.30	0.24	1.72
178.	0.	42.70	2.94	2.94	739.	491.	1230.	7.68	5.11
12.79	1.152	0.767	1.919	1.526	0.011	1.191	0.325		
SPPN TSYBS1741281010703 01						BD1: 5.1	0.86	0.09	2.28
682.	0.	42.70	2.94	2.94	2830.	2248.	5078.	29.87	23.72
53.59	12.843	10.200	23.042	2.291	0.061	4.990	1.361		
SPPN TSYBS1741282020703 01						BD1: 5.1	0.40	0.12	2.94
370.	0.	42.70	2.94	2.94	1536.	1220.	2755.	15.72	12.49
28.21	3.145	2.498	5.642	1.756	0.041	2.627	0.717		
SPPN TSYBS1742282020703 01						BD1: 5.1	0.40	0.07	2.94
113.	0.	43.00	2.94	2.94	469.	372.	841.	5.38	4.28
9.66	1.077	0.855	1.932	0.333	0.014	0.900	0.245		
SPPN TSYSS1741282020304 01						SD2: 6.7	0.28	0.11	5.03
331.	0.	40.60	2.94	2.94	1374.	1091.	2465.	14.18	11.26
25.44	2.013	1.599	3.612	1.424	0.064	2.454	0.669		
SPPN TSYSS1742282020103 01						SB2: 6.5	0.40	0.14	5.44
2136.	0.	40.60	2.94	2.94	8865.	7041.	15905.	97.18	77.19
174.37	19.437	15.437	34.874	11.857	0.475	16.823	4.588		
SPPN TSESS1741282020103 01						SB2: 6.5	0.50	0.34	5.44
668.	0.	42.70	2.94	2.94	2772.	2202.	4974.	29.01	23.04
52.04	7.252	5.759	13.011	8.926	0.142	5.021	1.369		
Unscrubbed Coal_NOx				3					

```
Unscrubbed Coal                 4
  SPPN  TCOLU1731281020310 01              BB2: 4.1 0.84  0.78  0.45    37.   0.
  32.00  1.54  1.54      154.       122.       276.     1.60     1.27     2.87
   0.671    0.533    1.203       1.123       0.001         0.267         0.073
  SPPN  TCOLU1731282020110 01              BB2: 4.1 0.46  0.78  2.62    38.   0.
  32.00  1.54  1.54      158.       125.       283.     1.64     1.30     2.94
   0.377    0.300    0.677       1.154       0.004         0.274         0.075
  SPPNMOTCOLU0511252050710 01              BB2: 4.1 0.48  1.00  4.10    43.   0.
  32.00  1.54  1.54      178.       142.       320.     1.86     1.47     3.33
   0.444    0.352    0.796       1.665       0.007         0.310         0.085
  SPPNMOTCOLU0511272050710 01              BB2: 4.1 0.48  1.00  4.10     8.   0.
  32.00  1.54  1.54       33.        26.        60.     0.35     0.27     0.62
   0.083    0.066    0.148       0.310       0.001         0.058         0.016
  SPPN  TOLBU1732282020110 01              BB2: 4.1 0.40  1.00  2.62   144.   0.
  32.00  1.54  1.54      598.       398.       995.     7.10     4.72    11.82
   1.419    0.944    2.363       5.909       0.016         1.100         0.300
  SPPN  TOLBU1742282020110 01              BB2: 4.1 0.40  1.00  2.62   148.   0.
  32.00  1.54  1.54      614.       488.      1102.     6.64     5.28    11.92
   1.329    1.055    2.384       5.960       0.016         1.110         0.303
  SPPNMOTOLBU0511281020110 01              SD2: 6.7 0.63  1.40  6.50    84.   0.
  32.00  1.54  1.54      349.       277.       625.     3.63     2.88     6.51
   1.142    0.907    2.049       4.554       0.021         0.628         0.171
  SPPNMOTOLBU0531281010110 01              BB2: 4.1 0.69  1.00  2.62    53.   0.
  32.00  1.54  1.54      141.       146.       288.     1.50     1.55     3.05
   0.515    0.533    1.048       1.525       0.004         0.284         0.077
  SPPNMOTOLBU0531281020110 01              BB2: 4.1 0.60  1.00  2.62    96.   0.
  32.00  1.54  1.54      334.       265.       599.     3.47     2.76     6.23
   1.046    0.831    1.878       3.114       0.008         0.580         0.158
  SPPNMOTOLBU0531282020110 01              BB2: 4.1 0.42  1.00  2.62    51.   0.
  32.00  1.54  1.54      177.       141.       318.     1.84     1.46     3.31
   0.384    0.305    0.688       1.654       0.004         0.308         0.084
  SPPNMOTSBSU0542282020110 01              SB2: 6.5 0.30  0.48  6.29   161.   0.
  32.00  1.54  1.54      668.       445.      1113.     7.14     4.75    11.90
   1.072    0.713    1.784       2.879       0.037         1.148         0.313
  SPPN  TSCBU1731282010310 01              BB2: 4.1 0.85  0.70  0.45    55.   0.
  32.00  1.54  1.54      228.       181.       410.     2.33     1.85     4.19
   0.997    0.792    1.790       1.473       0.001         0.390         0.106
  SPPN  TSCBU1732281010110 01              BB2: 4.1 1.01  1.00  2.62    73.   0.
  32.00  1.54  1.54      303.       241.       544.     3.29     2.61     5.90
   1.661    1.319    2.980       2.950       0.008         0.549         0.150
  SPPN  TSCBU1732282020110 01              BB2: 4.1 0.40  1.00  2.62    54.   0.
  32.00  1.54  1.54      188.       149.       337.     2.35     1.86     4.21
   0.469    0.373    0.842       2.105       0.006         0.392         0.107
  SPPN  TSESU1741282020110 01              SB2: 6.5 0.46  0.78  6.29   235.   0.
  22.40  1.54  1.54      975.       775.      1750.    10.11     8.03    18.15
   2.326    1.848    4.174       7.069       0.057         1.751         0.478
  SPPN  TSFBU1742282020110 01              BB2: 4.1 0.50  1.00  2.62   135.   0.
  26.40  1.54  1.54      560.       373.       933.     6.25     4.16    10.40
   1.562    1.039    2.601       5.202       0.014         0.969         0.264
  SPPNMOTSGBU0511271020710 01              BG1: 8.0 0.95  5.00  8.04     6.   0.
  32.00  1.54  1.54       25.        20.        45.     0.26     0.21     0.46
   0.124    0.098    0.222       1.162       0.002         0.043         0.012
  SPPNMOTSLBU0531281020110 01              BB2: 4.1 0.53  1.00  2.62    97.   0.
  26.40  1.54  1.54      337.       268.       605.     3.51     2.79     6.29
   0.929    0.738    1.667       3.146       0.008         0.586         0.160
  SPPNMOTSUBU0541272020110 01              BB2: 4.1 0.30  0.12  2.62   222.   0.
  22.40  1.54  1.54      921.       732.      1653.     9.72     7.72    17.44
   1.473    1.170    2.642       1.081       0.023         1.624         0.443
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  SPPN  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1182.   0.
 142.90  0.56  0.56     5668.      4084.      9752.    55.33    39.87    95.20
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
```

```
  SPPN  HYDRO00     000000 00                HYDRO    0.00  0.00  0.00   333.   0.
  15.10  0.00  0.00      601.       418.      1020.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  SPPNMOCC   0522   000000 00                GAS      0.02  0.00  0.00  1437.   0.
  13.90  1.03  1.03     2897.      2223.      5120.    21.73    16.67    38.40
   0.217    0.167    0.384       0.000       0.000         2.038         0.556
IGCC                          10
Turbine                       11
  SPPN  CT   1711   000000 00                GAS      0.10  0.00  0.00    17.   0.
   8.50  1.03  1.03        4.         9.        13.     0.04     0.08     0.11
   0.002    0.004    0.006       0.000       0.000         0.006         0.002
  SPPN  CT   1712   000000 00                GAS      0.10  0.00  0.00   214.   0.
   9.00  0.00  1.03        0.       111.       111.     0.00     1.19     1.19
   0.000    0.060    0.060       0.000       0.000         0.063         0.017
  SPPN  CT   1713   000000 00                GAS      0.10  0.00  0.00    90.   0.
   9.60  0.00  1.03        0.        16.        16.     0.00     0.21     0.21
   0.000    0.011    0.011       0.000       0.000         0.011         0.003
  SPPN  CT   1714   000000 00                GAS      0.10  0.00  0.00   493.   0.
  10.30  0.00  1.03        0.        84.        84.     0.00     1.20     1.20
   0.000    0.062    0.062       0.000       0.000         0.064         0.017
  SPPN  CT   1722   000000 00                GAS      0.09  0.00  0.00   353.   0.
   3.60  0.00  1.03        0.       183.       183.     0.00     2.03     2.03
   0.000    0.092    0.092       0.000       0.000         0.108         0.029
  SPPN  CT   1723   000000 00                GAS      0.11  0.00  0.00   637.   0.
  10.70  0.00  1.03        0.       301.       301.     0.00     3.83     3.83
   0.000    0.205    0.205       0.000       0.000         0.204         0.056
  SPPN  CT   1724   000000 00                GAS      0.10  0.00  0.00    81.   0.
   2.80  0.00  1.03        0.        14.        14.     0.00     0.20     0.20
   0.000    0.010    0.010       0.000       0.000         0.011         0.003
  SPPNMOCT   0511   000000 00                GAS      0.10  0.00  0.00     2.   0.
   7.80  1.03  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.001       0.000       0.000         0.001         0.000
  SPPNMOCT   0512   000000 00                GAS      0.11  0.00  0.00   103.   0.
  10.00  1.03  1.03       17.        53.        70.     0.17     0.55     0.73
   0.009    0.030    0.039       0.000       0.000         0.039         0.011
  SPPNMOCT   0513   000000 00                GAS      0.10  0.00  0.00    11.   0.
   2.80  0.00  1.03        0.         2.         2.     0.00     0.03     0.03
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  SPPNMOCT   0514   000000 00                GAS      0.11  0.00  0.00   309.   0.
  10.80  0.00  1.03        0.        53.        53.     0.00     0.76     0.76
   0.000    0.043    0.043       0.000       0.000         0.040         0.011
  SPPNMOCT   0522   000000 00                GAS      0.09  0.00  0.00  1320.   0.
   3.70  0.00  1.03        0.       683.       683.     0.00     7.49     7.49
   0.000    0.352    0.352       0.000       0.000         0.397         0.108
  SPPNMOCT   0523   000000 00                GAS      0.11  0.00  0.00   733.   0.
   9.40  0.00  1.03        0.       126.       126.     0.00     1.62     1.62
   0.000    0.092    0.092       0.000       0.000         0.086         0.023
Biomass                       12
Geothermal                    13
Landfill Gas                  14
Wind                          15
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
Fossil_Other                  19
Pump Storage                  20
  SPPN  PUMPS00     000000 00                NONE     0.00  0.00 71.00   155.   0.
   6.50  0.00  0.00       32.        37.        69.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                  21
Cgn_Coal                      22
Cgn_Gas                       23
  SPPN  CGCT 1712   000000 00                GAS      0.08  0.00  0.00    15.   0.
   2.80  0.00  1.03        0.         8.         8.     0.00     0.08     0.08
```

```
   0.000    0.003    0.003       0.000       0.000         0.005         0.001
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  SPPNMOTOLSU0542281010110 01     SCR2     SB2: 6.5 0.06  1.00  6.29   211.  10.
  27.00  2.53  2.53      734.       583.      1316.     8.29     6.58    14.87
   0.236    0.188    0.424       7.436       0.047         1.435         0.391
  SPPNMOTSJBU0541281010110 01     SCR2     BB2: 4.1 0.07  1.00  2.62   390.   8.
  26.80  2.46  2.46     1619.      1286.      2904.    15.70    12.47    28.17
   0.542    0.430    0.972      14.085       0.037         2.623         0.715
Ret.ExistScrub & SCR           41
  SPPNMOTSBSS0542282020103 01     SCR1     SB2: 6.5 0.05  0.40  2.20   308.  11.
  43.60  3.98  3.98     1278.       850.      2129.    14.33     9.53    23.86
   0.358    0.238    0.597       4.797       0.026         2.302         0.628
  SPPNMOTSDSS0541282020103 01     SCR1     SB2: 6.5 0.05  0.30  2.20   670.   7.
  41.00  3.80  3.80     2781.      2208.      4989.    27.04    21.48    48.52
   0.676    0.537    1.213       7.181       0.053         4.682         1.277
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
```


(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu

Year: 2015, Region: SPPS (Emissions By Plant)

NOx SO2 MER CO2 Carbon

Generation Trillion
Emission Emission Emission Emission Emission
(lb/MBtu)(lb/TBtu)(MW) $
/KWyr VOM Mill/KWh (GWh) (Btu)
(1000 Tons) (1000 Tons) (Tons) (Mil Tonnes)(Mil Tonnes)
Unit Fuel NOx SO2 MERCURY Cap. Cap
. FO&M WINT. SUMM. WINTER SUMMER Total WINTER SUMMER Total
WINTER SUMMER Total Total Total Total Total Total
Scrubbed Coal_NOx 1
Scrubbed Coal 2
SPPS TSXSS3642282020104 01 SB2: 6.5 0.31 0.13 4.21 520. 0.
35.60 2.94 2.94 2158. 1714. 3872. 23.20 18.43 41.63
3.608 2.865 6.473 2.768 0.088 4.016 1.095
Unscrubbed Coal_NOx 3
SPPS TSASN3642282020102 01 SB2: 6.5 0.45 0.73 6.29 490. 0.
22.60 2.45 2.45 2034. 1615. 3649. 21.76 17.28 39.03
4.938 3.922 8.861 14.247 0.123 3.766 1.027
Unscrubbed Coal 4
SPPSTXTCOLU3531292050710 01 BB1: 3.4 0.32 1.00 3.41 26. 0.
22.40 1.54 1.54 108. 86. 194. 1.12 0.89 2.01
0.181 0.144 0.325 1.007 0.003 0.188 0.051
SPPS TSASU3641282020110 01 SB2: 6.5 0.39 0.73 6.29 3838. 0.
23.00 1.54 1.54 15928. 12651. 28579. 161.43 128.21 289.65
31.641 25.130 56.771 105.287 0.910 27.945 7.621
SPPSTXTSASU3541292020110 01 SB2: 6.5 0.26 0.61 6.29 346. 0.
26.40 1.54 1.54 1436. 1140. 2576. 14.25 11.32 25.57
1.824 1.449 3.273 7.811 0.080 2.467 0.673
SPPSTXTSASU3541292020310 01 SB2: 6.5 0.33 0.63 1.75 1800. 0.
22.40 1.54 1.54 7470. 5933. 13403. 73.17 58.11 131.29
12.256 9.734 21.990 41.224 0.115 12.666 3.454
Oil/Gas Steam 5
SPPS STLSU0821 000000 00 GAS 0.19 0.00 0.00 314. 0.
21.40 0.00 2.57 0. 331. 331. 0.00 3.34 3.34
0.000 0.319 0.319 0.000 0.000 0.177 0.048
SPPS STLSU3621 000000 00 GAS 0.28 0.00 0.00 4755. 0.
20.10 0.00 2.57 0. 5013. 5013. 0.00 49.90 49.90
0.000 7.085 7.085 0.000 0.000 2.648 0.722
SPPSTXSTLSU2521 000000 00 GAS 0.22 0.00 0.00 1134. 0.
20.30 0.00 2.57 0. 379. 379. 0.00 3.85 3.85
0.000 0.423 0.423 0.000 0.000 0.204 0.056
Oil/Gas Steam_Nox 6
Nuclear 7
Hydro 8
SPPS HYDRO00 000000 00 HYDRO 0.00 0.00 0.00 2445. 0.
15.00 0.00 0.00 4702. 3448. 8150. 0.00 0.00 0.00
0.000 0.000 0.000 0.000 0.000 0.000 0.000
Comb.Cycle Gas 9
SPPS CC 1022 000000 00 GAS 0.02 0.00 0.00 912. 0.
13.90 1.03 1.03 4087. 3135. 7223. 30.66 23.51 54.17
0.307 0.235 0.542 0.000 0.000 2.875 0.784

```
  SPPS  CC   3613   000000 00                GAS      0.14  0.00  0.00    40.   0.
  19.40  1.03  1.03        9.        21.        30.     0.09     0.22     0.31
   0.007    0.015    0.022       0.000       0.000         0.017         0.005
  SPPS  CC   3622   000000 00                GAS      0.03  0.00  0.00  6283.   0.
  14.00  1.03  1.03    12134.     14985.     27120.    92.22   113.89   206.11
   1.568    1.936    3.504       0.000       0.000        10.938         2.983
  SPPS  CC   3623   000000 00                GAS      0.14  0.00  0.00   219.   0.
  19.90  1.03  1.03       49.       339.       388.     0.49     3.38     3.87
   0.035    0.242    0.277       0.000       0.000         0.205         0.056
  SPPS  CC   3624   000000 00                GAS      0.10  0.00  0.00    39.   0.
  13.90  0.00  1.03        0.         7.         7.     0.00     0.10     0.10
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  SPPSMSCC   1613   000000 00                GAS      0.17  0.00  0.00    50.   0.
  19.80  1.03  1.03       11.        66.        77.     0.11     0.67     0.78
   0.010    0.058    0.068       0.000       0.000         0.042         0.011
  SPPSTXCC   2322   000000 00                GAS      0.02  0.00  0.00   745.   0.
  13.90  1.03  1.03     3339.      2561.      5900.    25.04    19.21    44.25
   0.250    0.192    0.443       0.000       0.000         2.348         0.640
  SPPSTXCC   2722   000000 00                GAS      0.02  0.00  0.00  1140.   0.
  13.90  1.03  1.03     5109.      3919.      9028.    38.32    29.39    67.71
   0.383    0.294    0.677       0.000       0.000         3.594         0.980
  SPPSTXCC   3522   000000 00                GAS      0.02  0.00  0.00   551.   0.
  13.90  1.03  1.03     2469.      1894.      4364.    18.52    14.21    32.73
   0.185    0.142    0.327       0.000       0.000         1.737         0.474
IGCC                            10
Turbine                         11
  SPPS  CT   0812   000000 00                GAS      0.13  0.00  0.00     6.   0.
  11.20  1.03  1.03        1.         1.         2.     0.01     0.01     0.03
   0.001    0.001    0.002       0.000       0.000         0.001         0.000
  SPPS  CT   0814   000000 00                GAS      0.11  0.00  0.00    35.   0.
  11.20  0.00  1.03        0.         6.         6.     0.00     0.09     0.09
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  SPPS  CT   0823   000000 00                GAS      0.10  0.00  0.00    66.   0.
  11.20  0.00  1.03        0.        11.        11.     0.00     0.14     0.14
   0.000    0.007    0.007       0.000       0.000         0.008         0.002
  SPPS  CT   0824   000000 00                GAS      0.11  0.00  0.00   244.   0.
   2.80  0.00  1.03        0.        42.        42.     0.00     0.60     0.60
   0.000    0.033    0.033       0.000       0.000         0.032         0.009
  SPPS  CT   1012   000000 00                GAS      0.10  0.00  0.00     9.   0.
   4.30  1.03  1.03        2.         5.         7.     0.02     0.05     0.07
   0.001    0.002    0.003       0.000       0.000         0.004         0.001
  SPPS  CT   1014   000000 00                GAS      0.11  0.00  0.00    76.   0.
  10.40  0.00  1.03        0.        13.        13.     0.00     0.19     0.19
   0.000    0.011    0.011       0.000       0.000         0.010         0.003
  SPPS  CT   1022   000000 00                GAS      0.08  0.00  0.00   457.   0.
   2.80  1.03  1.03       39.        79.       118.     0.43     0.86     1.29
   0.017    0.034    0.052       0.000       0.000         0.068         0.019
  SPPS  CT   3612   000000 00                GAS      0.11  0.00  0.00    11.   0.
   9.90  1.03  1.03        3.         6.         8.     0.03     0.06     0.09
   0.001    0.003    0.005       0.000       0.000         0.005         0.001
  SPPS  CT   3614   000000 00                GAS      0.11  0.00  0.00   161.   0.
  11.00  0.00  1.03        0.        28.        28.     0.00     0.40     0.40
   0.000    0.021    0.021       0.000       0.000         0.021         0.006
  SPPS  CT   3622   000000 00                GAS      0.08  0.00  0.00   512.   0.
   2.80  1.03  1.03      118.        88.       207.     1.29     0.96     2.26
   0.052    0.039    0.090       0.000       0.000         0.120         0.033
  SPPS  CT   3623   000000 00                GAS      0.10  0.00  0.00    53.   0.
  11.20  0.00  1.03        0.         9.         9.     0.00     0.13     0.13
   0.000    0.006    0.006       0.000       0.000         0.007         0.002
  SPPS  CT   3624   000000 00                GAS      0.10  0.00  0.00   162.   0.
  11.20  0.00  1.03        0.        28.        28.     0.00     0.40     0.40
   0.000    0.021    0.021       0.000       0.000         0.021         0.006
  SPPSMSCT   1614   000000 00                GAS      0.10  0.00  0.00    15.   0.
  11.20  0.00  1.03        0.         3.         3.     0.00     0.04     0.04
   0.000    0.002    0.002       0.000       0.000         0.002         0.001
```

```
  SPPSTXCT   2214   000000 00                GAS      0.10  0.00  0.00    40.   0.
  11.20  0.00  1.03        0.          7.          7.     0.00     0.10     0.10
   0.000    0.005    0.005       0.000       0.000          0.005          0.001
  SPPSTXCT   2322   000000 00                GAS      0.08  0.00  0.00   100.   0.
   2.80  0.00  1.03        0.         17.         17.     0.00     0.19     0.19
   0.000    0.008    0.008       0.000       0.000          0.010          0.003
  SPPSTXCT   2512   000000 00                GAS      0.10  0.00  0.00     3.   0.
  11.20  1.03  1.03        1.          1.          1.     0.01     0.01     0.01
   0.000    0.000    0.001       0.000       0.000          0.001          0.000
  SPPSTXCT   2513   000000 00                GAS      0.10  0.00  0.00     5.   0.
  11.20  0.00  1.03        0.          1.          1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000          0.001          0.000
  SPPSTXCT   2514   000000 00                GAS      0.10  0.00  0.00    47.   0.
  11.20  0.00  1.03        0.          8.          8.     0.00     0.12     0.12
   0.000    0.006    0.006       0.000       0.000          0.006          0.002
  SPPSTXCT   2524   000000 00                GAS      0.10  0.00  0.00    48.   0.
  11.20  0.00  1.03        0.          8.          8.     0.00     0.12     0.12
   0.000    0.006    0.006       0.000       0.000          0.006          0.002
  SPPSTXCT   2722   000000 00                GAS      0.08  0.00  0.00    95.   0.
   2.80  0.00  1.03        0.         16.         16.     0.00     0.18     0.18
   0.000    0.007    0.007       0.000       0.000          0.009          0.003
  SPPSTXCT   3513   000000 00                GAS      0.10  0.00  0.00     2.   0.
   7.80  0.00  1.03        0.          0.          0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
  SPPSTXCT   3514   000000 00                GAS      0.10  0.00  0.00    43.   0.
  11.20  0.00  1.03        0.          7.          7.     0.00     0.11     0.11
   0.000    0.005    0.005       0.000       0.000          0.006          0.002
Biomass                        12
Geothermal                     13
Landfill Gas                   14
  SPPS  LFGAS00     000000 00                WASTE    0.25  0.00  0.00     9.   0.
  78.60 10.48 10.48       40.         31.         71.     0.55     0.42     0.97
   0.068    0.052    0.119       0.000       0.000          0.000          0.000
Wind                           15
  SPPS  WIND 00     000000 00                NONE     0.00  0.00 71.00    66.   0.
  26.40  0.00  0.00       66.         37.        102.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  SPPS  OTHER00     000000 00                NONE     0.00  0.00  0.00    13.   0.
 103.60  0.00  0.00       57.         45.        102.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
  SPPS  OTHER00     000000 00                NONE     0.00  0.00  0.00    10.   0.
 103.60  0.00  0.00       44.         35.         79.     0.48     0.38     0.87
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
Fossil_Other                   19
Pump Storage                   20
  SPPS  PUMPS00     000000 00                NONE     0.00  0.00 71.00   288.   0.
   6.50  0.00  0.00        0.         43.         43.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
Int. Imports                   21
Cgn_Coal                       22
  SPPS  CGCOU3641282050710 01                BB1: 3.4 0.39  1.00  3.41   307.   0.
  11.70  1.54  1.54     1243.        595.       1838.    10.63     5.09    15.71
   2.067    0.989    3.056       7.856       0.027          1.463          0.399
  SPPS  CGCOU3641282050710 01                BB2: 4.1 0.39  1.00  4.10   307.   0.
  11.70  1.54  1.54        0.        408.        408.     0.00     3.49     3.49
   0.000    0.678    0.678       1.744       0.007          0.325          0.089
Cgn_Gas                        23
  SPPS  CGCT 1012   000000 00                GAS      0.09  0.00  0.00     4.   0.
   2.80  1.03  1.03        1.          2.          3.     0.01     0.02     0.03
   0.000    0.001    0.001       0.000       0.000          0.002          0.000
  SPPS  CGCT 3612   000000 00                GAS      0.11  0.00  0.00    43.   0.
   2.80  1.03  1.03       10.         67.         77.     0.09     0.64     0.73
```

```
   0.005    0.034    0.039       0.000       0.000         0.039         0.011
  SPPS  CGCT 3622   000000 00              GAS      0.11  0.00  0.00    55.   0.
   2.80  1.03  1.03        13.        86.        98.     0.13     0.84     0.97
   0.007    0.045    0.052       0.000       0.000         0.051         0.014
  SPPSTXCGCT 3512   000000 00              GAS      0.10  0.00  0.00    20.   0.
   2.80  1.03  1.03         5.        31.        36.     0.04     0.30     0.34
   0.002    0.015    0.017       0.000       0.000         0.018         0.005
  SPPSTXCGCT 3522   000000 00              GAS      0.10  0.00  0.00   254.   0.
   2.80  1.03  1.03        59.       395.       454.     0.56     3.77     4.33
   0.028    0.190    0.219       0.000       0.000         0.230         0.063
  SPPS  CGCC 1022   000000 00              GAS      0.02  0.00  0.00   448.   0.
  13.90  1.03  1.03      1887.      1540.      3427.    14.16    11.55    25.71
   0.142    0.116    0.257       0.000       0.000         1.364         0.372
  SPPS  CGCC 3622   000000 00              GAS      0.02  0.00  0.00   450.   0.
  13.90  1.03  1.03      2017.      1547.      3564.    15.13    11.60    26.73
   0.151    0.116    0.267       0.000       0.000         1.418         0.387
  SPPS  CGCC 3623   000000 00              GAS      0.18  0.00  0.00   108.   0.
  13.90  1.03  1.03        24.       167.       191.     0.24     1.66     1.90
   0.022    0.151    0.173       0.000       0.000         0.101         0.027
Cgn_Oil                        24
Cgn_Other                      25
  SPPS  CGBIO00  51 000000 00              B1-: 0.6 0.02  0.08  0.57     2.   0.
  44.80  5.36  5.36         9.         7.        15.     0.07     0.06     0.13
   0.001    0.001    0.001       0.005       0.000         0.000         0.000
  SPPS  CGOTH00     000000 00              NONE     0.00  0.00  0.00    34.   0.
 103.60  0.00  0.00       147.       114.       261.     0.59     0.45     1.04
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  SPPS  TSASU1041292020210 01     RL02     BD1: 5.1 0.05  0.06  0.51   982.  31.
  31.98  3.43  3.43      4075.      3237.      7312.    41.80    33.20    75.01
   1.045    0.830    1.875       2.250       0.019         6.985         1.905
  SPPSTXTSASU2341292020210 01     ML02SCR1 BD1: 5.1 0.05  0.06  0.51  1034.  30.
  33.92  3.45  3.45      4291.      3408.      7698.    44.80    35.58    80.38
   1.120    0.889    2.009       2.411       0.020         7.485         2.041
  SPPSTXTSASU2342292020210 01     ML02SCR1 BD1: 5.1 0.05  0.06  0.51   517.  31.
  31.98  3.48  3.48      2145.      1704.      3849.    23.33    18.53    41.86
   0.583    0.463    1.047       1.256       0.011         3.898         1.063
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
```

```
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: CALI     (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  CALI  TCOLU0811372050710 01              BB2: 4.1 0.09  1.00  4.10   113.   0.
  12.90  1.54  1.54      469.       372.       841.     4.88     3.87     8.75
   0.219    0.174    0.394       4.375       0.018         0.815         0.222
  CALI  TCOLU0832372050710 01              BB2: 4.1 0.40  1.00  4.10    58.   0.
  26.40  1.54  1.54      241.       191.       432.     2.91     2.31     5.22
   0.582    0.462    1.045       2.611       0.011         0.486         0.133
Oil/Gas Steam                  5
  CALI  STLSU0821   000000 00              GAS      0.02  0.00  0.00  5179.   0.
  20.90  2.57  2.57     2503.      1950.      4453.    23.87    18.60    42.46
   0.239    0.186    0.425       0.000       0.000         2.254         0.615
Oil/Gas Steam_Nox              6
Nuclear                        7
  CALI  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1086.   0.
 190.30  0.86  0.86     5191.      3888.      9079.    51.32    38.44    89.76
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  CALI  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1095.   0.
 145.90  0.62  0.62     5037.      3751.      8789.    52.66    39.22    91.88
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  CALI  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1109.   0.
  95.90  0.62  0.62     5642.      3429.      9071.    59.26    36.01    95.27
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  CALI  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1096.   0.
 190.30  0.86  0.86     4371.      4020.      8391.    43.21    39.75    82.96
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  CALI  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00 11313.   0.
  15.00  0.00  0.00    16750.     17655.     34405.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  CALI  CC   0812   000000 00              GAS      0.10  0.00  0.00    40.   0.
  19.90  1.03  1.03      134.       103.       238.     1.18     0.91     2.09
   0.059    0.045    0.105       0.000       0.000         0.111         0.030
  CALI  CC   0813   000000 00              GAS      0.02  0.00  0.00    65.   0.
  19.40  0.00  1.03        0.        11.        11.     0.00     0.12     0.12
   0.000    0.001    0.001       0.000       0.000         0.007         0.002
  CALI  CC   0822   000000 00              GAS      0.02  0.00  0.00  5856.   0.
  13.90  1.03  1.03    26245.     20132.     46377.   197.65   151.61   349.27
   1.977    1.516    3.493       0.000       0.000        18.536         5.055
  CALI  CC   0823   000000 00              GAS      0.02  0.00  0.00   513.   0.
  19.40  1.03  1.03      115.       249.       364.     1.18     2.56     3.74
   0.011    0.023    0.034       0.000       0.000         0.198         0.054
  CALI  CC   0824   000000 00              GAS      0.02  0.00  0.00   272.   0.
  19.90  0.00  1.03        0.        47.        47.     0.00     0.55     0.55
   0.000    0.004    0.004       0.000       0.000         0.029         0.008
  CALI  CC   8     (b)                     GAS      0.02  0.00  0.00  7700.  73.
  11.70  1.95  1.95    35411.     25556.     60968.   249.86   180.32   430.19
   2.499    1.803    4.302       0.000       0.000        22.830         6.226
IGCC                           10
Turbine                        11
  CALI  CT   0812   000000 00              GAS      0.13  0.00  0.00     3.   0.
   9.50  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  CALI  CT   0813   000000 00              GAS      0.11  0.00  0.00   203.   0.
   9.50  0.00  1.03        0.        35.        35.     0.00     0.46     0.46
   0.000    0.025    0.025       0.000       0.000         0.024         0.007
  CALI  CT   0821   000000 00              GAS      0.10  0.00  0.00    48.   0.
   2.80  1.03  1.03      167.        25.       192.     1.53     0.23     1.76
   0.078    0.012    0.090       0.000       0.000         0.094         0.026
  CALI  CT   0822   000000 00              GAS      0.08  0.00  0.00  2209.   0.
   2.80  0.00  1.03        0.       380.       380.     0.00     4.16     4.16
   0.000    0.166    0.166       0.000       0.000         0.221         0.060
  CALI  CT   0823   000000 00              GAS      0.07  0.00  0.00   927.   0.
  10.30  0.00  1.03        0.       160.       160.     0.00     2.02     2.02
   0.000    0.072    0.072       0.000       0.000         0.107         0.029
Biomass                        12
  CALI  BIOMS00  54 000000 00              B1-: 0.6 0.02  0.08  0.57   432.   0.
  44.80  5.36  5.36     1872.      1447.      3319.    17.09    13.21    30.30
   0.171    0.132    0.303       1.212       0.009         0.000         0.000
Geothermal                     13
  CALI  GEO  00     000000 00              GEOTH    0.00  0.00  2.97  2665.   0.
  87.40  0.00  0.00    11344.      8966.     20310.   291.69   230.53   522.21
   0.000    0.000    0.000       0.000       0.775         0.000         0.000
Landfill Gas                   14
  CALI  LFGAS00     000000 00              WASTE    0.25  0.00  0.00   216.   0.
  78.60 10.48 10.48      966.       737.      1703.    12.24     9.34    21.58
   1.506    1.148    2.654       0.000       0.000         0.000         0.000
Wind                           15
  CALI  WIND 00     000000 00              NONE     0.00  0.00 71.00  1931.   0.
  26.40  0.00  0.00     4635.      2599.      7234.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
```

```
  CALI  SOLAR00     000000 00                NONE     0.00  0.00 71.00   324.   0.
  47.00  0.00  0.00      516.       274.       790.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other              18
  CALI  OTHER00     000000 00                NONE     0.00  0.00 27.90   178.   0.
 103.60  0.00  0.00      785.       619.      1403.     9.00     7.10    16.10
   0.000    0.000    0.000       0.000       0.225         0.000         0.000
Fossil_Other                  19
  CALI  WASTE081    000000 00                WASTE    0.13  0.00  0.00    20.   0.
 103.60  0.00  0.00       89.        68.       158.     0.98     0.75     1.73
   0.064    0.049    0.114       0.000       0.000         0.000         0.000
Pump Storage                  20
  CALI  PUMPS00     000000 00                NONE     0.00  0.00 71.00  4432.   0.
   6.50  0.00  0.00        0.       428.       428.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                  21
Cgn_Coal                      22
  CALI  CGCOU0811372050710 01                BB2: 4.1 0.09  1.00  4.10    68.   0.
  20.50  1.54  1.54      275.       222.       497.     2.47     1.99     4.46
   0.111    0.090    0.200       2.228       0.009         0.415         0.113
  CALI  CGCOU0831372050710 01                BB2: 4.1 0.09  1.00  4.10   153.   0.
  11.70  1.54  1.54      619.       500.      1119.     5.37     4.34     9.71
   0.242    0.195    0.437       4.854       0.020         0.904         0.247
  CALI  CGCOU0832372050710 01                BB2: 4.1 0.09  1.00  4.10    69.   0.
  11.70  1.54  1.54      279.       225.       505.     3.05     2.46     5.51
   0.137    0.111    0.248       2.753       0.011         0.513         0.140
  CALI  CGCOD0831372050307 01                BD1: 5.1 0.09  0.36  0.15    45.   0.
  35.80  3.84  3.84      182.       147.       329.     1.49     1.20     2.69
   0.067    0.054    0.121       0.484       0.000         0.250         0.068
Cgn_Gas                       23
  CALI  CGCT 0811   000000 00                GAS      0.09  0.00  0.00    25.   0.
   7.80  1.03  1.03      116.        65.       181.     0.99     0.56     1.55
   0.046    0.026    0.071       0.000       0.000         0.082         0.022
  CALI  CGCT 0812   000000 00                GAS      0.09  0.00  0.00   369.   0.
   8.30  1.03  1.03     1281.       191.      1472.    12.33     1.84    14.17
   0.567    0.085    0.652       0.000       0.000         0.752         0.205
  CALI  CGCT 0821   000000 00                GAS      0.09  0.00  0.00   162.   0.
   2.80  1.03  1.03      750.       420.      1170.     6.36     3.56     9.93
   0.293    0.164    0.457       0.000       0.000         0.527         0.144
  CALI  CGCT 0822   000000 00                GAS      0.09  0.00  0.00  2348.   0.
   2.90  1.03  1.03     3432.      1215.      4647.    34.62    12.26    46.88
   1.593    0.564    2.157       0.000       0.000         2.488         0.679
  CALI  CGCC 0811   000000 00                GAS      0.02  0.00  0.00     1.   0.
  13.90  1.03  1.03        4.         3.         8.     0.03     0.02     0.05
   0.000    0.000    0.000       0.000       0.000         0.003         0.001
  CALI  CGCC 0812   000000 00                GAS      0.02  0.00  0.00   213.   0.
  14.20  1.03  1.03      955.       549.      1504.     7.95     4.57    12.52
   0.072    0.041    0.113       0.000       0.000         0.664         0.181
  CALI  CGCC 0813   000000 00                GAS      0.02  0.00  0.00   319.   0.
  14.50  1.03  1.03     1072.       164.      1237.    10.35     1.59    11.94
   0.093    0.014    0.107       0.000       0.000         0.634         0.173
  CALI  CGCC 0822   000000 00                GAS      0.02  0.00  0.00  2938.   0.
  13.90  1.03  1.03    13168.     10100.     23268.   100.71    77.25   177.95
   1.007    0.772    1.780       0.000       0.000         9.444         2.576
  CALI  CGCC 0823   000000 00                GAS      0.02  0.00  0.00   840.   0.
  14.60  1.03  1.03     2824.       433.      3256.    27.35     4.19    31.54
   0.246    0.038    0.284       0.000       0.000         1.674         0.456
Cgn_Oil                       24
  CALI  CGLSN0821   000000 00                GAS      0.02  0.00  0.00   430.   0.
  21.60  3.02  3.02     1741.      1124.      2864.    13.16     8.50    21.66
   0.099    0.064    0.162       0.000       0.000         1.150         0.314
Cgn_Other                     25
  CALI  CGBIO00  54 000000 00                B1-: 0.6 0.02  0.08  0.57    74.   0.
  44.80  5.36  5.36      321.       248.       569.     2.80     2.17     4.97
   0.028    0.022    0.050       0.199       0.001         0.000         0.000
```

```
  CALI  CGFWT082    000000 00              WASTE    0.13  0.02 20.87    29.   0.
 103.60  0.00  0.00      130.        99.       229.     0.77     0.59     1.36
   0.050    0.038    0.089       0.011       0.014         0.000         0.000
  CALI  CGOTH00     000000 00              NONE     0.00  0.00  0.00    29.   0.
 103.60  0.00  0.00      126.        97.       223.     0.53     0.41     0.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
  CALI  STGAU0811   000000 00     OC01     GAS      0.02  0.00  0.00    80.  63.
  11.70  1.95  1.95      359.       275.       634.     2.59     1.99     4.57
   0.026    0.020    0.046       0.000       0.000         0.243         0.066
  CALI  STGAU0821   000000 00     OC01     GAS      0.02  0.00  0.00   144.  63.
  11.70  1.95  1.95      645.       495.      1139.     4.65     3.57     8.23
   0.047    0.036    0.082       0.000       0.000         0.437         0.119
  CALI  STLSC0821   000000 00     OC01     GAS      0.02  0.00  0.00    62.  63.
  11.70  1.95  1.95      278.       213.       491.     2.01     1.54     3.55
   0.020    0.015    0.035       0.000       0.000         0.188         0.051
  CALI  STHSC0821   000000 00     OC01     GAS      0.02  0.00  0.00  3941.  63.
  11.70  1.95  1.95    17665.     13550.     31214.   127.54    97.83   225.37
   1.275    0.978    2.254       0.000       0.000        11.960         3.262
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
```

```
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------
Year: 2015, Region: PNW      (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  PNW WATSBSS0741372020103 01              SE1: 5.5 0.40  0.11  4.65  1340.   0.
  42.70  2.94  2.94     5561.      4417.      9978.    56.95    45.23   102.17
  11.389    9.046   20.435       5.364       0.237         9.858         2.688
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  PNW   TABU 0711371030710 01              BD1: 5.1 0.90  0.61  5.07    25.   0.
  32.00  1.54  1.54      104.        82.       186.     1.08     0.86     1.94
   0.483    0.384    0.866       0.595       0.005         0.180         0.049
  PNW ORTSASU0842372020110 01              SB1: 4.5 0.42  0.74  4.41   508.   0.
  22.40  1.54  1.54     2108.      1674.      3783.    22.85    18.14    40.99
   4.798    3.810    8.608      15.187       0.090         3.955         1.079
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  PNW   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1123.   0.
 153.70  0.66  0.66     5713.      3138.      8851.    57.49    31.58    89.07
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  PNW   HYDRO00     000000 00              HYDRO    0.00  0.00  0.00 42633.   0.
  14.80  0.00  0.00    63340.     47747.    111087.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  PNW   CC   0722   000000 00              GAS      0.03  0.00  0.00  1512.   0.
  13.90  1.03  1.03     6776.      5198.     11974.    51.93    39.84    91.77
   0.727    0.558    1.285       0.000       0.000         4.870         1.328
  PNW   CC   0822   000000 00              GAS      0.06  0.00  0.00  1533.   0.
  13.90  1.03  1.03     6871.      5270.     12141.    54.27    41.63    95.90
   1.520    1.166    2.685       0.000       0.000         5.089         1.388
  PNW   CC   8     (b)                     GAS      0.02  0.00  0.00  2525.  71.
  11.70  1.95  1.95    11612.      8381.     19993.    81.94    59.13   141.07
   0.819    0.591    1.411       0.000       0.000         7.487         2.042
IGCC                          10
Turbine                       11
  PNW   CT   0722   000000 00              GAS      0.09  0.00  0.00  1151.   0.
   2.80  1.03  1.03      199.      3978.      4177.     2.15    42.93    45.08
   0.098    1.953    2.051       0.000       0.000         2.393         0.653
  PNW   CT   0812   000000 00              GAS      0.13  0.00  0.00     3.   0.
```

```
   2.80  1.03  1.03       14.        10.        24.     0.13     0.10     0.23
   0.008    0.006    0.015       0.000       0.000         0.012         0.003
  PNW   CT   0822   000000 00              GAS      0.09  0.00  0.00   371.   0.
   2.80  1.03  1.03     1717.      1282.      3000.    18.41    13.74    32.15
   0.810    0.605    1.415       0.000       0.000         1.706         0.465
Biomass                         12
  PNW   BIOMS00  52 000000 00              B1-: 0.6 0.02  0.08  0.57     6.   0.
  44.80  5.36  5.36       26.        20.        46.     0.21     0.16     0.37
   0.002    0.002    0.004       0.015       0.000         0.000         0.000
Geothermal                      13
  PNW   GEO  00     000000 00              GEOTH    0.00  0.00  3.70     8.   0.
  87.40  0.00  0.00       34.        27.        61.     1.10     0.87     1.97
   0.000    0.000    0.000       0.000       0.004         0.000         0.000
Landfill Gas                    14
  PNW   LFGAS00     000000 00              WASTE    0.25  0.00  0.00    21.   0.
  78.60 10.48 10.48       94.        72.       166.     1.28     0.98     2.26
   0.158    0.120    0.278       0.000       0.000         0.000         0.000
Wind                            15
  PNW   WIND 00     000000 00              NONE     0.00  0.00 71.00   412.   0.
  26.40  0.00  0.00      185.       104.       290.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  PNW   OTHER00     000000 00              NONE     0.00  0.00 40.61    58.   0.
 103.60  0.00  0.00      256.       202.       457.     2.81     2.22     5.03
   0.000    0.000    0.000       0.000       0.102         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
  PNW   WAIMP00     000000 00              NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00     7601.      5486.     13087.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                        22
Cgn_Gas                         23
  PNW   CGCC 0722   000000 00              GAS      0.07  0.00  0.00   165.   0.
  13.90  1.03  1.03      739.       567.      1307.     5.34     4.09     9.43
   0.181    0.139    0.321       0.000       0.000         0.501         0.137
  PNW   CGCC 0723   000000 00              GAS      0.07  0.00  0.00   123.   0.
  13.90  1.03  1.03      551.       423.       974.     5.42     4.16     9.57
   0.184    0.141    0.326       0.000       0.000         0.508         0.139
  PNW   CGCC 0812   000000 00              GAS      0.08  0.00  0.00    13.   0.
  13.90  1.03  1.03       58.        45.       103.     0.45     0.35     0.80
   0.017    0.013    0.031       0.000       0.000         0.042         0.012
  PNW   CGCC 0822   000000 00              GAS      0.05  0.00  0.00   820.   0.
  13.90  1.03  1.03     3675.      2819.      6494.    28.03    21.50    49.53
   0.743    0.570    1.313       0.000       0.000         2.629         0.717
Cgn_Oil                         24
Cgn_Other                       25
  PNW   CGBIO00  52 000000 00              B1-: 0.6 0.02  0.08  0.57    96.   0.
  44.80  5.36  5.36      416.       321.       738.     3.55     2.75     6.30
   0.036    0.027    0.063       0.252       0.002         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
  PNW   STLSU0721   000000 00     OC01     GAS      0.02  0.00  0.00    94.  59.
  11.70  1.95  1.95      421.       323.       744.     3.04     2.33     5.37
   0.030    0.023    0.054       0.000       0.000         0.285         0.078
```

Rep.Coal-IGCC	36
Ret.Scrubber	37
Ret.ExistSCR & Scrub	38
Ret.ExistSNCR & Scrub	39
Ret.SCR	40
Ret.ExistScrub & SCR	41
Ret.SNCR	42
Ret.ExistScrub & SNCR	43
Ret.SCR+Scrb	44
Ret.SNCR+Scrub	45
Ret.Gas Reburn	46
Ret.ExistScrub+GasR	47
Ret.GasReburn+Scrub	48
Ret.ACI	49
Ret.ExistScrub&ACI	50
Ret.ExistSCR&ACI	51
Ret.ExistSNCR&ACI	52
Ret.ACI & SCR	53
Ret.ExistScrub&ACI&SCR	54
Ret.ACI & SNCR	55
Ret.ExistScrub&ACI&SNCR	56
Ret.ACI & Srub	57
Ret.ExistSCR&ACI&Scrub	58
Ret.ExistSNCR&ACI&Scrub	59
Ret.ExistSNCR&ExistScrub&ACI	60
Ret.ExistSCR&ExistScrub&ACI	61
Ret.ExistNOx&ExistScrub&ACI	62
Ret.SCR & Scrub & ACI	63
Ret.SNCR & Scrub & ACI	64
Ret.O/G SCR	65
Ret.O/G SNCR	66
Ret.Nuclear (age 30+10 yrs)	67
Ret.Nuclear (age 40+20 yrs)	68
Ret. Biomass Cofiring	69
CT Early Retirement	70
CC Early Retirement	71
O/G Early Retirement	72
Coal Early Retirement	73
Nuke Early Retirement	74

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation reported in BBtu

---

Year: 2015, Region: AZNM (Emissions By Plant)

	NOx			SO2		MER	CO2		Carbon											
	Emission			Generation	Emission	Emission	Emission		Trillion Emission											
	(1000 Tons)			(GWh)	(1000 Tons)	(Tons)	(lb/MBtu)		(lb/TBtu)											
							(Mil Tonnes)		(Mil Tonnes)											
Unit						Fuel	NOx		SO2		MERCURY									
.	FO&M	WINT.	SUMM.	WINTER	SUMMER	Total	WINTER		SUMMER		Total									
WINTER	SUMMER	Total																		
Scrubbed Coal_NOx				1																
Scrubbed Coal				2																

```
  AZNM  TSUBS0841361020203 01                BD1: 5.1 0.46  0.10  2.94   365.   0.
  40.60  2.94  2.94     1515.      1203.      2718.    15.47    12.29    27.76
   3.559    2.826    6.385       1.333       0.041         2.585         0.705
  AZNM  TSUBS0841352020203 01                BD1: 5.1 0.40  0.07  2.94  2250.   0.
  42.70  2.94  2.94     9338.      7416.     16754.    90.64    71.99   162.63
  18.128   14.398   32.526       5.489       0.239        15.145         4.130
  AZNM  TSUBS0841362020203 01                BD1: 5.1 0.44  0.39  2.94  1095.   0.
  40.60  2.94  2.94     4544.      3609.      8154.    46.82    37.18    84.00
  10.276    8.162   18.438      16.569       0.124         7.822         2.133
  AZNM  TSUBS0841362020304 01                BD1: 5.1 0.40  0.20  0.25   720.   0.
  29.40  2.94  2.94     2988.      2373.      5361.    26.90    21.36    48.26
   5.379    4.272    9.651       4.886       0.006         4.494         1.226
  AZNM  TSUBS0841362020703 01                BD1: 5.1 0.40  0.52  2.94   355.   0.
  41.30  2.94  2.94     1473.      1170.      2643.    15.27    12.13    27.40
   3.055    2.426    5.481       7.070       0.040         2.552         0.696
  AZNM  TSXBS0841362020303 01                BD1: 5.1 0.46  0.07  0.15   275.   0.
  40.60  2.94  2.94     1141.       906.      2048.    11.87     9.43    21.30
   2.730    2.168    4.898       0.783       0.002         1.983         0.541
  AZNM  TSXBS0841362020703 01                BD1: 5.1 0.46  0.06  2.94   220.   0.
  42.80  2.94  2.94      913.       725.      1638.     9.59     7.61    17.20
   2.205    1.751    3.956       0.490       0.025         1.602         0.437
  AZNM  TSXBS0842362020703 01                BD1: 5.1 0.46  0.06  2.94   110.   0.
  42.70  2.94  2.94      457.       363.       819.     4.98     3.95     8.93
   1.144    0.909    2.053       0.254       0.013         0.831         0.227
  AZNM  TSXSS0841351020303 01                SD2: 6.7 0.57  0.31  1.81  1480.   0.
  42.70  2.94  2.94     6142.      4878.     11021.    59.34    47.13   106.47
  16.912   13.432   30.344      16.694       0.096        10.272         2.801
  AZNM  TSXSS0841352020203 01                SD2: 6.7 0.46  0.36  5.36   498.   0.
  40.60  2.94  2.94     2067.      1641.      3708.    21.47    17.05    38.53
   4.938    3.922    8.861       6.931       0.103         3.717         1.014
  AZNM  TSXSS0841352020303 01                SD2: 6.7 0.34  0.06  1.81   235.   0.
  40.60  2.94  2.94      975.       775.      1750.    10.15     8.06    18.21
   1.725    1.370    3.096       0.523       0.016         1.757         0.479
  AZNM  TSXSS0842351020203 01                SD2: 6.7 0.46  0.28  5.36   312.   0.
  42.70  2.94  2.94     1295.      1028.      2323.    16.66    13.23    29.90
   3.833    3.044    6.876       4.207       0.080         2.885         0.787
  AZNM  TSXSS0842351020703 01                SD2: 6.7 0.46  0.31  4.69   220.   0.
  43.00  2.94  2.94      913.       725.      1638.    10.07     8.00    18.07
   2.316    1.839    4.156       2.808       0.042         1.743         0.475
  AZNM  TSXSS0842352020203 01                SD2: 6.7 0.46  0.36  5.36   804.   0.
  41.50  2.94  2.94     3337.      2650.      5987.    39.59    31.44    71.03
   9.105    7.231   16.336      12.828       0.190         6.853         1.869
  AZNM  TSXSS0842352020703 01                SD2: 6.7 0.46  0.31  4.69   340.   0.
  43.00  2.94  2.94     1411.      1121.      2532.    15.17    12.05    27.22
   3.489    2.771    6.260       4.229       0.064         2.626         0.716
Unscrubbed Coal_NOx             3
Unscrubbed Coal                 4
  AZNM  TSBBU0841361020310 01                BB1: 3.4 0.46  0.77  0.38   156.   0.
  32.00  1.54  1.54      647.       514.      1162.     6.62     5.25    11.87
   1.522    1.209    2.730       4.570       0.002         1.105         0.301
  AZNM  TSBBU0841362020210 01                BB1: 3.4 0.40  0.78  3.07   260.   0.
  22.40  1.54  1.54     1079.       857.      1936.    11.22     8.91    20.13
   2.244    1.782    4.027       7.862       0.031         1.875         0.511
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  AZNM  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1255.   0.
  84.20  0.42  0.42     5779.      4493.     10272.    61.46    47.78   109.24
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1310.   0.
  84.20  0.42  0.42     5677.      4656.     10334.    59.61    48.89   108.50
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1259.   0.
  84.20  0.42  0.42     5303.      4623.      9926.    55.36    48.26   103.62
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
```

```
Hydro                           8
  AZNM  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2490.   0.
  15.40  0.00  0.00     3484.      3538.      7022.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  AZNM  CC   0812   000000 00              GAS      0.16  0.00  0.00    19.   0.
  13.90  1.03  1.03       64.        49.       113.     0.50     0.39     0.89
   0.040    0.031    0.071       0.000       0.000         0.047         0.013
  AZNM  CC   0813   000000 00              GAS      0.16  0.00  0.00    16.   0.
  19.90  0.00  1.03        0.         3.         3.     0.00     0.03     0.03
   0.000    0.002    0.002       0.000       0.000         0.002         0.000
  AZNM  CC   0822   000000 00              GAS      0.02  0.00  0.00  8832.   0.
  13.90  1.03  1.03    39184.     29407.     68591.   295.17   221.52   516.70
   3.542    2.658    6.200       0.000       0.000        27.421         7.479
  AZNM  CC   0823   000000 00              GAS      0.15  0.00  0.00   510.   0.
  19.50  1.03  1.03     1120.       263.      1383.    11.00     2.58    13.58
   0.847    0.199    1.046       0.000       0.000         0.721         0.197
  AZNMTXCC   3523   000000 00              GAS      0.16  0.00  0.00   232.   0.
  19.90  0.00  1.03        0.        40.        40.     0.00     0.43     0.43
   0.000    0.034    0.034       0.000       0.000         0.023         0.006
IGCC                           10
Turbine                        11
  AZNM  CT   0822   000000 00              GAS      0.08  0.00  0.00  1747.   0.
   3.10  0.00  1.03        0.       301.       301.     0.00     3.31     3.31
   0.000    0.136    0.136       0.000       0.000         0.176         0.048
Biomass                        12
  AZNM  BIOMS00  53 000000 00              B1-: 0.6 0.02  0.08  0.57    18.   0.
  44.80  5.36  5.36       78.        60.       138.     0.62     0.48     1.11
   0.006    0.005    0.011       0.044       0.000         0.000         0.000
  AZNM  BIOCC0     (a)                    B1-: 0.6 0.02  0.08  0.57    44. 200.
  44.80  5.34  5.34      195.       141.       336.     1.61     1.16     2.76
   0.016    0.012    0.028       0.111       0.001         0.000         0.000
Geothermal                     13
  AZNM  GEO  00     000000 00              GEOTH    0.00  0.00  3.70    29.   0.
  87.40  0.00  0.00      123.        98.       221.     3.99     3.15     7.14
   0.000    0.000    0.000       0.000       0.013         0.000         0.000
  AZNM  GEOA 0     (a)                     GEOTH    0.00  0.00  3.70   280. 352.
  85.80  0.00  0.00     1244.       898.      2142.    40.30    29.09    69.39
   0.000    0.000    0.000       0.000       0.128         0.000         0.000
Landfill Gas                   14
  AZNM  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    11.   0.
  78.60 10.48 10.48       49.        38.        87.     0.67     0.51     1.18
   0.083    0.063    0.146       0.000       0.000         0.000         0.000
  AZNM  LG   0     (a)                     WASTE    0.25  0.00  0.00     6. 181.
  78.60 10.48 10.48       25.        18.        43.     0.25     0.18     0.43
   0.031    0.022    0.053       0.000       0.000         0.000         0.000
Wind                           15
  AZNM  WIND 00     000000 00              NONE     0.00  0.00 71.00    49.   0.
  26.40  0.00  0.00      102.        57.       159.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  WIN510     (a)                     NONE     0.00  0.00 71.00   263. 144.
  26.40  0.00  0.00      501.       257.       758.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
  AZNM  SOLAR00     000000 00              NONE     0.00  0.00 71.00    61.   0.
  47.00  0.00  0.00       17.        12.        29.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  SLRPV0     (a)                     NONE     0.00  0.00 71.00     3. 359.
  10.00  0.00  0.00        4.         3.         6.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other               18
Fossil_Other                   19
Pump Storage                   20
  AZNM  PUMPS00     000000 00              NONE     0.00  0.00 71.00   185.   0.
```

```
   6.50  0.00  0.00       64.        46.       110.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                  21
Cgn_Coal                      22
Cgn_Gas                       23
  AZNM  CGCT 0822   000000 00              GAS      0.11  0.00  0.00    57.   0.
   2.80  1.03  1.03       13.        30.        43.     0.13     0.29     0.42
   0.007    0.016    0.023       0.000       0.000         0.022         0.006
  AZNM  CGCC 0812   000000 00              GAS      0.15  0.00  0.00    73.   0.
  13.90  1.03  1.03      245.       188.       434.     2.07     1.59     3.66
   0.151    0.116    0.267       0.000       0.000         0.194         0.053
  AZNM  CGCC 0813   000000 00              GAS      0.15  0.00  0.00   102.   0.
  13.90  1.03  1.03      343.       158.       501.     3.19     1.47     4.66
   0.235    0.108    0.343       0.000       0.000         0.247         0.067
  AZNM  CGCC 0822   000000 00              GAS      0.04  0.00  0.00  1190.   0.
  13.90  1.03  1.03     4000.      3068.      7068.    30.36    23.29    53.65
   0.562    0.431    0.992       0.000       0.000         2.847         0.776
  AZNM  CGCC 0823   000000 00              GAS      0.15  0.00  0.00   113.   0.
  13.90  1.03  1.03      380.       175.       555.     3.58     1.65     5.23
   0.267    0.123    0.390       0.000       0.000         0.278         0.076
Cgn_Oil                       24
Cgn_Other                     25
NonCG IPP_Coal                26
NonCG IPP_Gas                 27
NonCG IPP_Other               28
Blr_Coal                      29
Blr_Gas                       30
Blr_Oil                       31
Blr_Other                     32
SteamOnly Cogen               33
Rep.Coal-CC                   34
Rep.O/G-CC                    35
Rep.Coal-IGCC                 36
Ret.Scrubber                  37
Ret.ExistSCR & Scrub          38
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
Ret.ExistScrub & SCR          41
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
```

```
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: RMPA     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                        Trillion
         Emission             Emission    Emission      Emission       Emission
                                                       (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                           (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  RMPA  TCOLA0831402020105 01              BD1: 5.1 0.11  0.08  0.51    80.   0.
  23.60  3.91  3.91      332.       264.       596.     2.99     2.37     5.36
   0.164    0.131    0.295       0.201       0.001         0.499         0.136
Scrubbed Coal                  2
  RMPA  TRRBS0832342030304 01              BD1: 5.1 0.26  0.53  0.25   100.   0.
  23.10  2.94  2.94      415.       330.       745.     4.84     3.85     8.69
   0.630    0.500    1.130       2.288       0.001         0.809         0.221
  RMPA  TSABS0841341020303 01              BD1: 5.1 0.46  0.08  0.15   158.   0.
  43.00  2.94  2.94      656.       521.      1177.     6.64     5.28    11.92
   1.528    1.213    2.741       0.447       0.001         1.110         0.303
  RMPA  TSABS0841341020304 01              BD1: 5.1 0.80  0.15  0.25   107.   0.
  43.00  2.94  2.94      444.       353.       797.     4.48     3.56     8.03
   1.790    1.422    3.213       0.602       0.001         0.748         0.204
  RMPA  TSABS0841342020303 01              BD1: 5.1 0.40  0.08  0.15   352.   0.
  42.70  2.94  2.94     1461.      1160.      2621.    14.07    11.17    25.24
   2.814    2.235    5.048       0.947       0.002         2.351         0.641
  RMPA  TSABS0841342020304 01              BD1: 5.1 0.43  0.53  0.25   446.   0.
  42.80  2.94  2.94     1851.      1470.      3321.    19.47    15.47    34.94
   4.138    3.286    7.424       9.302       0.004         3.253         0.887
  RMPA  TSUBS0841332020304 01              BD1: 5.1 0.33  0.08  0.25   262.   0.
  40.60  2.94  2.94     1087.       864.      1951.    11.40     9.05    20.45
   1.880    1.493    3.374       0.767       0.003         1.904         0.519
  RMPA  TSUBS0842332020203 01              BD1: 5.1 0.33  0.15  2.94   856.   0.
  40.60  2.94  2.94     3553.      2821.      6374.    37.81    30.03    67.85
   6.334    5.030   11.364       4.987       0.100         6.318         1.723
  RMPA  TSUBS0842332020304 01              BD1: 5.1 0.45  0.15  0.25   519.   0.
  41.10  2.94  2.94     2154.      1711.      3865.    22.90    18.19    41.08
   5.106    4.056    9.162       3.081       0.005         3.826         1.043
  RMPA  TSXSS0832402020104 01              SD2: 6.7 0.18  0.13  4.36    80.   0.
  23.10  2.94  2.94      332.       264.       596.     3.82     3.03     6.85
   0.344    0.273    0.617       0.456       0.015         0.661         0.180
  RMPAWYTSZLS0841322020103 01              SE1: 5.5 0.32  0.05  4.65  1100.   0.
  40.60  2.94  2.94     4565.      3626.      8191.    47.59    37.80    85.39
   7.615    6.048   13.662       2.152       0.198         8.238         2.247
```

```
  RMPA  TSASS0841342020303 01              SD2: 6.7 0.40  0.07  1.81   178.   0.
  43.00  2.94  2.94      739.       587.      1325.     7.42     5.90    13.32
   1.485    1.179    2.664       0.466       0.012         1.285         0.350
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  RMPA  TCOLU0811351020710 01              BB1: 3.4 0.91  1.00  3.41     7.   0.
  32.00  1.54  1.54       29.        23.        52.     0.30     0.24     0.54
   0.137    0.109    0.247       0.271       0.001         0.050         0.014
  RMPA  TCOLU0811402050110 01              BB2: 4.1 0.46  0.41  2.62    30.   0.
  32.00  1.54  1.54      125.        99.       223.     1.29     1.03     2.32
   0.301    0.239    0.540       0.474       0.003         0.216         0.059
  RMPA  TCOLU0811342050710 01              BB1: 3.4 0.46  0.64  3.41    19.   0.
  32.00  1.54  1.54       79.         0.        79.     0.82     0.00     0.82
   0.189    0.000    0.189       0.264       0.001         0.076         0.021
  RMPA  TCOLU0811342050710 01              BB2: 4.1 0.46  0.64  4.10    19.   0.
  32.00  1.54  1.54        0.        63.        63.     0.00     0.65     0.65
   0.000    0.150    0.150       0.210       0.001         0.061         0.017
  RMPA  TCOLU0811352050710 01              BB1: 3.4 0.47  0.45  3.41     5.   0.
  32.00  1.54  1.54       21.        16.        37.     0.22     0.17     0.39
   0.051    0.040    0.091       0.087       0.001         0.036         0.010
  RMPA  TCOLU0831331020310 01              BB2: 4.1 0.80  1.00  0.45    45.   0.
  32.00  1.54  1.54      187.       148.       335.     1.94     1.54     3.48
   0.777    0.617    1.394       1.742       0.001         0.325         0.089
  RMPA  TOLSU0812321020110 01              SB1: 4.5 1.28  1.00  4.41    15.   0.
  26.40  1.54  1.54       62.        49.       112.     0.87     0.69     1.55
   0.553    0.439    0.992       0.776       0.003         0.150         0.041
  RMPA  TSABU0841341020310 01              BB1: 3.4 0.80  0.74  0.38   106.   0.
  32.00  1.54  1.54      440.       349.       789.     4.60     3.65     8.25
   1.839    1.460    3.299       3.039       0.002         0.768         0.209
  RMPA  TSABU0841342020310 01              BB1: 3.4 0.46  0.70  0.38   208.   0.
  22.40  1.54  1.54      863.       686.      1549.     8.68     6.89    15.57
   1.995    1.585    3.580       5.425       0.003         1.450         0.395
  RMPA  TSASU0832342020310 01              SB2: 6.5 0.46  1.00  1.75    49.   0.
  32.00  1.54  1.54      203.       162.       365.     2.21     1.76     3.97
   0.509    0.405    0.914       1.987       0.003         0.383         0.105
  RMPA  TSASU0841342020310 01              SB2: 6.5 0.44  0.65  1.75  1155.   0.
  24.70  1.54  1.54     4793.      3807.      8600.    49.38    39.22    88.59
  10.937    8.686   19.623      28.793       0.078         8.547         2.331
  RMPA  TSBBU0812341020710 01              BB1: 3.4 0.96  1.00  3.41    48.   0.
  32.00  1.54  1.54      199.       125.       324.     2.50     1.57     4.08
   1.204    0.756    1.960       2.038       0.007         0.380         0.104
  RMPA  TSBBU0812341020710 01              BB2: 4.1 0.96  1.00  4.10    48.   0.
  32.00  1.54  1.54        0.        33.        33.     0.00     0.42     0.42
   0.000    0.200    0.200       0.208       0.001         0.039         0.011
  RMPA  TSCBU0832342020310 01              BB1: 3.4 0.46  0.61  0.38   126.   0.
  28.50  1.54  1.54      523.       415.       938.     6.01     4.77    10.78
   1.381    1.097    2.478       3.303       0.002         1.003         0.274
  RMPA  TSCBU0841342020310 01              BB1: 3.4 0.46  0.61  0.38   133.   0.
  26.40  1.54  1.54      552.       438.       990.     5.79     4.60    10.39
   1.331    1.057    2.389       3.194       0.002         0.967         0.264
  RMPA  TSLSU0712261020110 01              SB1: 4.5 1.27  0.67  4.41    22.   0.
  32.00  1.54  1.54       91.        73.       164.     1.10     0.88     1.98
   0.698    0.554    1.253       0.658       0.004         0.191         0.052
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
Hydro                          8
  RMPA  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2692.   0.
  15.30  0.00  0.00     3767.      3826.      7592.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  RMPA  CC   0822   000000 00              GAS      0.03  0.00  0.00  1281.   0.
  13.90  1.03  1.03     4783.      2344.      7126.    36.32    17.80    54.12
   0.563    0.276    0.839       0.000       0.000         2.872         0.783
IGCC                          10
```

```
Turbine                         11
  RMPA  CT   0722   000000 00              GAS      0.08  0.00  0.00    48.   0.
   2.80  1.03  0.00        11.         0.        11.     0.12     0.00     0.12
   0.005    0.000    0.005       0.000       0.000         0.006         0.002
  RMPA  CT   0812   000000 00              GAS      0.08  0.00  0.00    10.   0.
   2.80  1.03  0.00         2.         0.         2.     0.03     0.00     0.03
   0.001    0.000    0.001       0.000       0.000         0.001         0.000
  RMPA  CT   0822   000000 00              GAS      0.08  0.00  0.00  1444.   0.
   3.00  1.03  0.00       116.         0.       116.     1.27     0.00     1.27
   0.053    0.000    0.053       0.000       0.000         0.067         0.018
Biomass                         12
  RMPA  BIOMS00  53 000000 00              B1-: 0.6 0.02  0.08  0.57     1.   0.
  44.80  5.36  5.36         4.         3.         8.     0.03     0.03     0.06
   0.000    0.000    0.001       0.002       0.000         0.000         0.000
Geothermal                      13
Landfill Gas                    14
  RMPA  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     1.   0.
  78.60 10.48 10.48         4.         3.         8.     0.06     0.05     0.11
   0.008    0.006    0.013       0.000       0.000         0.000         0.000
Wind                            15
  RMPA  WIND 00     000000 00              NONE     0.00  0.00 71.00   270.   0.
  26.40  0.00  0.00       648.       363.      1011.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
  RMPA  SOLAR00     000000 00              NONE     0.00  0.00 71.00     3.   0.
  47.00  0.00  0.00         5.         3.         7.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other                18
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
Cgn_Gas                         23
  RMPA  CGCT 0812   000000 00              GAS      0.12  0.00  0.00     3.   0.
   2.80  1.03  1.03         1.         1.         1.     0.01     0.01     0.01
   0.000    0.000    0.001       0.000       0.000         0.001         0.000
  RMPA  CGCT 0821   000000 00              GAS      0.12  0.00  0.00    36.   0.
   2.80  1.03  1.03       125.         7.       132.     1.05     0.06     1.11
   0.064    0.004    0.068       0.000       0.000         0.059         0.016
  RMPA  CGCT 0822   000000 00              GAS      0.08  0.00  0.00    71.   0.
   2.80  1.03  0.00        16.         0.        16.     0.18     0.00     0.18
   0.007    0.000    0.007       0.000       0.000         0.010         0.003
  RMPA  CGCC 0812   000000 00              GAS      0.13  0.00  0.00    55.   0.
  13.90  1.03  1.03       185.         9.       194.     1.63     0.08     1.71
   0.109    0.006    0.115       0.000       0.000         0.091         0.025
  RMPA  CGCC 0822   000000 00              GAS      0.11  0.00  0.00   144.   0.
  13.90  1.03  1.03       484.        25.       509.     4.13     0.21     4.34
   0.219    0.011    0.230       0.000       0.000         0.231         0.063
Cgn_Oil                         24
Cgn_Other                       25
  RMPA  CGBIO00  53 000000 00              B1-: 0.6 0.02  0.08  0.57     7.   0.
  44.80  5.36  5.36        30.        23.        54.     0.24     0.19     0.43
   0.002    0.002    0.004       0.017       0.000         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
```

```
Ret.Scrubber                  37
Ret.ExistSCR & Scrub          38
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
Ret.ExistScrub & SCR          41
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2015, Region: NWPE     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  NWPE  TSABS0841352020104 01              BD1: 5.1 0.40  0.15  3.24  1580.   0.
```

```
  42.70  2.94  2.94     5725.      4168.      9893.    59.17    43.08   102.25
  11.834    8.615   20.449       7.669       0.166         9.522         2.597
  NWPE  TSXBS0841332020103 01              BD1: 5.1 0.40  0.12  1.72  1250.   0.
  41.30  2.94  2.94     5188.      4120.      9308.    51.36    40.79    92.15
  10.272    8.158   18.430       5.529       0.079         8.581         2.340
  NWPE  TSXBS0841402020103 01              BD1: 5.1 0.43  0.17  1.72  2410.   0.
  42.30  2.94  2.94    10002.      7944.     17946.    99.89    79.33   179.22
  21.576   17.136   38.712      15.323       0.154        16.690         4.552
  NWPE  TSXBS0841332020303 01              BD1: 5.1 0.46  0.03  0.15  2440.   0.
  40.60  2.94  2.94    10126.      8043.     18169.   100.04    79.45   179.49
  22.859   18.155   41.014       3.096       0.014        16.715         4.559
  NWPE  TSXBS0841362020304 01              BD1: 5.1 0.28  0.11  0.25   274.   0.
  40.60  2.94  2.94     1137.       903.      2040.    11.38     9.04    20.42
   1.594    1.266    2.859       1.149       0.003         1.902         0.519
  NWPE  TSXSS0741322020703 01              SE1: 5.5 0.40  0.08  3.87   700.   0.
  40.60  2.94  2.94     2905.      2307.      5212.    30.36    24.11    54.46
   6.071    4.822   10.893       2.059       0.105         5.255         1.433
  NWPE  TSXSS0742322020703 01              SD1: 4.4 0.40  0.13  3.08  1360.   0.
  41.60  2.94  2.94     5644.      4483.     10127.    62.13    49.35   111.48
  12.426    9.869   22.295       7.101       0.172        10.755         2.933
  NWPEWYTSZLS0841322020703 01              SD1: 4.4 0.40  0.17  3.08   330.   0.
  42.70  2.94  2.94     1370.      1088.      2457.    14.38    11.42    25.80
   2.876    2.284    5.160       2.167       0.040         2.489         0.679
  NWPEWYTSZLS0842322020104 01              SD1: 4.4 0.50  0.19  2.86   335.   0.
  40.60  2.94  2.94     1390.      1104.      2495.    16.24    12.90    29.14
   4.060    3.224    7.284       2.815       0.042         2.811         0.767
Unscrubbed Coal_NOx             3
Unscrubbed Coal                 4
  NWPE  TCOLU0811332050710 01              BB2: 4.1 0.44  0.53  4.10     8.   0.
  32.00  1.54  1.54       33.        26.        60.     0.35     0.27     0.62
   0.076    0.061    0.137       0.163       0.001         0.058         0.016
  NWPE  TCOLU0831332050710 01              BB2: 4.1 0.44  1.00  4.10    50.   0.
  11.70  1.54  1.54      208.       165.       372.     2.16     1.71     3.87
   0.478    0.380    0.858       1.936       0.008         0.361         0.098
  NWPE  TSABU0832332020110 01              BB2: 4.1 0.40  0.78  2.62    70.   0.
  32.00  1.54  1.54      291.       231.       521.     3.25     2.58     5.84
   0.651    0.517    1.168       2.274       0.008         0.544         0.148
  NWPE  TSABU0841332020110 01              BB2: 4.1 0.40  0.78  2.62   105.   0.
  32.00  1.54  1.54      436.       346.       782.     4.58     3.63     8.21
   0.915    0.727    1.642       3.194       0.011         0.764         0.208
  NWPE  TSABU0841352020310 01              BB1: 3.4 0.31  0.68  0.38   258.   0.
  22.40  1.54  1.54     1071.       850.      1921.    10.76     8.54    19.30
   1.667    1.324    2.992       6.534       0.004         1.797         0.490
  NWPE  TSASU0742322020110 01              SB1: 4.5 0.40  1.00  4.41   156.   0.
  26.40  1.54  1.54      647.       514.      1162.     7.13     5.66    12.79
   1.426    1.132    2.558       6.395       0.028         1.234         0.337
  NWPE  TSASU0841322020110 01              SB1: 4.5 0.46  1.00  4.41   106.   0.
  32.00  1.54  1.54      440.       349.       789.     4.66     3.70     8.37
   1.073    0.852    1.924       4.183       0.018         0.807         0.220
  NWPE  TSASU0842322020110 01              SB1: 4.5 0.61  1.00  4.41   336.   0.
  32.00  1.54  1.54     1394.      1108.      2502.    15.01    11.92    26.93
   4.585    3.642    8.227      13.464       0.059         2.598         0.709
  NWPE  TSBBU0841332020110 01              BB2: 4.1 0.40  1.00  2.62   425.   0.
  26.40  1.54  1.54     1764.      1401.      3165.    17.11    13.59    30.70
   3.422    2.718    6.139      15.349       0.040         2.859         0.780
  NWPE  TSXBU0841402020110 01              BB2: 4.1 0.40  0.30  2.62   370.   0.
  28.90  1.54  1.54     1536.      1220.      2755.    15.58    12.37    27.95
   3.115    2.474    5.589       4.192       0.037         2.602         0.710
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
Hydro                           8
  NWPE  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  1758.   0.
  15.20  0.00  0.00     2460.      2498.      4958.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
```

```
Comb.Cycle Gas                  9
  NWPE  CC   0722   000000 00                GAS      0.02  0.00  0.00   240.   0.
  13.90  1.03  1.03      807.       271.      1077.     6.05     2.03     8.08
   0.061    0.020    0.081       0.000       0.000         0.429         0.117
IGCC                            10
  NWPE  IGCC 0831402050710 00                BD1: 5.1 0.06  0.00  0.25   100.   0.
  31.40  1.00  1.00      433.       335.       768.     3.15     2.44     5.59
   0.095    0.073    0.168       0.000       0.001         0.520         0.142
Turbine                         11
  NWPE  CT   0722   000000 00                GAS      0.08  0.00  0.00   160.   0.
   2.80  0.00  1.03        0.        15.        15.     0.00     0.16     0.16
   0.000    0.006    0.006       0.000       0.000         0.008         0.002
  NWPE  CT   0811   000000 00                GAS      0.13  0.00  0.00    14.   0.
   2.80  1.03  1.03       49.         2.        51.     0.44     0.02     0.46
   0.028    0.001    0.029       0.000       0.000         0.024         0.007
  NWPE  CT   0812   000000 00                GAS      0.10  0.00  0.00    53.   0.
   2.80  0.00  1.03        0.         9.         9.     0.00     0.10     0.10
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
Biomass                         12
  NWPE  BIOMS00  52 000000 00                B1-: 0.6 0.02  0.08  0.57     5.   0.
  44.80  5.36  5.36       22.        17.        38.     0.17     0.13     0.31
   0.002    0.001    0.003       0.012       0.000         0.000         0.000
Geothermal                      13
  NWPE  GEO  00     000000 00                GEOTH    0.00  0.00  3.65   241.   0.
  87.40  0.00  0.00     1026.       811.      1837.    32.60    25.77    58.37
   0.000    0.000    0.000       0.000       0.106         0.000         0.000
Landfill Gas                    14
Wind                            15
  NWPE  WIND 00     000000 00                NONE     0.00  0.00 71.00   138.   0.
  26.40  0.00  0.00       62.        35.        97.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
  NWPE  SOLAR00     000000 00                NONE     0.00  0.00 71.00    24.   0.
  47.00  0.00  0.00       38.        20.        59.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other                18
Fossil_Other                    19
  NWPE  WASTE072    000000 00                WASTE    0.70  0.01 10.30    41.   0.
 103.60  0.00  0.00      183.       140.       323.     2.02     1.54     3.56
   0.706    0.538    1.244       0.012       0.018         0.000         0.000
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
  NWPE  CGCOU0731322050710 01                SB1: 4.5 0.36  1.00  4.55    55.   0.
  11.70  1.54  1.54      223.       180.       402.     1.81     1.46     3.28
   0.325    0.263    0.588       1.638       0.007         0.316         0.086
Cgn_Gas                         23
  NWPE  CGCC 0811   000000 00                GAS      0.15  0.00  0.00    10.   0.
  13.90  1.03  1.03       45.        34.        79.     0.29     0.22     0.51
   0.021    0.016    0.037       0.000       0.000         0.027         0.007
Cgn_Oil                         24
Cgn_Other                       25
  NWPE  CGOTH00     000000 00                NONE     0.00  0.00  0.00    10.   0.
 103.60  0.00  0.00       43.        33.        77.     0.18     0.14     0.32
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
```

Rep.O/G-CC	35
Rep.Coal-IGCC	36
Ret.Scrubber	37
Ret.ExistSCR & Scrub	38
Ret.ExistSNCR & Scrub	39
Ret.SCR	40
Ret.ExistScrub & SCR	41
Ret.SNCR	42
Ret.ExistScrub & SNCR	43
Ret.SCR+Scrb	44
Ret.SNCR+Scrub	45
Ret.Gas Reburn	46
Ret.ExistScrub+GasR	47
Ret.GasReburn+Scrub	48
Ret.ACI	49
Ret.ExistScrub&ACI	50
Ret.ExistSCR&ACI	51
Ret.ExistSNCR&ACI	52
Ret.ACI & SCR	53
Ret.ExistScrub&ACI&SCR	54
Ret.ACI & SNCR	55
Ret.ExistScrub&ACI&SNCR	56
Ret.ACI & Srub	57
Ret.ExistSCR&ACI&Scrub	58
Ret.ExistSNCR&ACI&Scrub	59
Ret.ExistSNCR&ExistScrub&ACI	60
Ret.ExistSCR&ExistScrub&ACI	61
Ret.ExistNOx&ExistScrub&ACI	62
Ret.SCR & Scrub & ACI	63
Ret.SNCR & Scrub & ACI	64
Ret.O/G SCR	65
Ret.O/G SNCR	66
Ret.Nuclear (age 30+10 yrs)	67
Ret.Nuclear (age 40+20 yrs)	68
Ret. Biomass Cofiring	69
CT Early Retirement	70
CC Early Retirement	71
O/G Early Retirement	72
Coal Early Retirement	73
Nuke Early Retirement	74

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu

Year: 2015, Region: MECS (Emissions By Plant Type)

	Generation			Trillion			Emission			NOx Emission			SO2 Emission			MER Emission			CO2 Emission			Carbon Emission		
	(GWh)			(Btu)			(1000 Tons)			(1000 Tons)			(Tons)			(Mil Tonnes)			(Mil Tonnes)					
	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER																
Total Scrubbed Coal_NOx	83.	66.	149.	0.86	0.69	1.55	0.168	0.134																

0.302 0.258 0.000 0.144 0.039
Total Scrubbed Coal 2
477. 379. 856. 5.40 4.29 9.69 0.846 0.672
1.518 0.457 0.011 0.902 0.246
Total Unscrubbed Coal_NOx 3
12533. 9954. 22488. 115.39 91.65 207.04 2.171 1.725
3.896 103.521 0.456 19.970 5.446
Total Unscrubbed Coal 4
26102. 19263. 45365. 257.64 189.94 447.58 42.943 31.632
74.575 208.413 0.788 42.417 11.568
Total Oil/Gas Steam 5
1053. 570. 1623. 10.10 5.46 15.56 1.005 0.544
1.548 0.000 0.000 0.826 0.225
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
4676. 4072. 8748. 60.17 52.40 112.57 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
618. 395. 1013. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
3798. 2274. 6071. 28.51 17.11 45.62 0.292 0.188
0.480 0.000 0.000 2.421 0.660
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
41. 390. 432. 0.43 4.25 4.68 0.021 0.173
0.194 0.000 0.000 0.248 0.068
Total Biomass 12
698. 539. 1237. 6.44 4.97 11.41 0.064 0.050
0.114 0.456 0.003 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
22. 17. 39. 0.31 0.23 0.54 0.038 0.029
0.066 0.000 0.000 0.000 0.000
Total Wind 15
2. 1. 2. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
145. 115. 260. 1.60 1.26 2.86 0.000 0.000
0.000 0.000 0.046 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
1115. 839. 1954. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
1. 1. 2. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
223. 151. 373. 2.31 1.56 3.88 0.468 0.316
0.784 1.940 0.007 0.361 0.099
Total Cgn_Gas 23

```
    4197.      2686.      6884.    30.93    20.73    51.66     2.074    1.321
 3.395       0.000       0.000        2.742         0.748
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Cgn_Other                      25
     316.       244.       561.     1.68     1.30     2.98     0.007    0.005
 0.012       0.050       0.062        0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.SCR                        40
    5806.      4611.     10417.    54.26    43.10    97.36     1.448    1.150
 2.598      48.679       0.128        9.066         2.473
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
```

Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MECS
   61908.     46567.    108476.   576.03   438.94  1014.98    51.546   37.937
89.483     363.772       1.501        79.097        21.572
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: ECAO     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
   40273.     31824.     72097.   396.73   313.19   709.92    13.488   10.342
23.830      91.528       0.434        66.110        18.030
Total Scrubbed Coal                 2
    1903.      1409.      3312.    19.80    14.58    34.39     5.018    3.761
 8.779       8.161       0.082         3.202         0.873
Total Unscrubbed Coal_NOx           3
    6997.      4630.     11628.    67.02    44.35   111.37     7.055    4.665
11.719      61.537       0.171        10.371         2.828
Total Unscrubbed Coal               4
   27138.     18478.     45616.   277.01   188.51   465.52    54.431   36.834
91.265     259.481       0.902        43.589        11.888
Total Oil/Gas Steam                 5
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox                6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                          7
   22460.     14798.     37257.   235.58   155.01   390.59     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                            8
    1806.      1169.      2974.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                   9
   12910.      9872.     22782.    97.11    74.25   171.36     1.119    0.855
 1.974       0.000       0.000         9.094         2.480
Total IGCC                            10
    1135.       877.      2013.     8.26     6.38    14.64     0.413    0.319
 0.732       0.000       0.006         1.364         0.372
Total Turbine                         11
    3781.      2003.      5784.    41.35    21.91    63.26     1.689    0.895
 2.583       0.000       0.000         3.357         0.916
Total Biomass                         12
     364.       281.       645.     3.36     2.59     5.95     0.034    0.026
 0.060       0.238       0.002         0.000         0.000
Total Geothermal                      13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                    14
      54.        41.        95.     0.73     0.56     1.29     0.090    0.069
 0.159       0.000       0.000         0.000         0.000
Total Wind                            15
     164.        92.       256.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                           17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
     397.       313.       710.     4.36     3.44     7.81     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                    19
     268.       205.       473.     2.95     2.25     5.20     0.614    0.468
 1.082       0.000       0.000         0.000         0.000
Total Pump Storage                    20
     152.       110.       262.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
     678.       466.      1144.     6.18     4.18    10.37     1.382    0.954
 2.335       4.736       0.019         0.965         0.263
Total Cgn_Gas                         23
    1129.       865.      1994.     8.70     6.65    15.35     0.111    0.084
 0.195       0.000       0.000         0.815         0.222
Total Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
      26.        20.        46.     0.22     0.17     0.39     0.002    0.002
 0.004       0.016       0.000         0.000         0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
49431. 39259. 88690. 473.37 375.96 849.34 12.911 10.254
23.164 81.180 0.418 79.092 21.571
Total Ret.ExistSNCR & Scrub 39
9995. 7938. 17933. 95.41 75.77 171.18 14.066 11.171
25.237 18.342 0.258 15.941 4.348
Total Ret.SCR 40
31795. 23421. 55215. 305.15 224.41 529.56 9.374 6.923
16.298 270.789 0.908 49.520 13.505
Total Ret.ExistScrub & SCR 41
52736. 41884. 94621. 523.44 415.72 939.16 13.749 10.920
24.669 207.302 0.428 87.457 23.852
Total Ret.SNCR 42
1767. 1100. 2867. 18.51 11.52 30.02 4.009 2.504
6.513 15.942 0.048 2.796 0.762
Total Ret.ExistScrub & SNCR 43
722. 574. 1296. 8.00 6.36 14.36 1.362 1.082
2.444 2.896 0.012 1.337 0.365
Total Ret.SCR+Scrb 44
65942. 52373. 118315. 640.83 508.96 1149.79 16.962 13.471
30.433 101.713 0.847 107.071 29.201
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total ECAO
  334023.    254001.    588025.  3234.08  2456.74  5690.82   157.877  115.598  2
73.476    1123.859       4.533       482.082       131.477
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: ERCT     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
   17327.     16428.     33755.   184.92   176.54   361.46    29.105   27.626
56.731     109.463       0.910        35.210         9.603
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    7437.      5907.     13344.    71.94    57.14   129.08    11.191    8.888
20.079      45.628       0.334        12.303         3.355
Total Oil/Gas Steam                 5
    1905.     18939.     20843.    18.67   190.55   209.23     4.500   27.283
31.783       0.000       0.000        11.104         3.028
Total Oil/Gas Steam_Nox             6
       0.      3030.      3030.     0.00    30.13    30.13     0.000    1.322
 1.322       0.000       0.000         1.599         0.436
Total Nuclear                       7
   22733.     17771.     40504.   237.70   185.63   423.33     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
     431.       365.       796.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Comb.Cycle Gas 9
76323. 64278. 140602. 565.69 478.15 1043.84 5.782 5.069
10.851 0.000 0.000 55.397 15.108
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
2903. 6148. 9051. 27.21 56.21 83.43 1.326 2.767
4.093 0.000 0.000 4.427 1.207
Total Biomass 12
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
564. 419. 983. 6.73 5.02 11.75 0.828 0.618
1.446 0.000 0.000 0.000 0.000
Total Wind 15
1852. 1022. 2874. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
44. 35. 79. 0.48 0.38 0.87 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
9. 7. 16. 0.10 0.08 0.17 0.020 0.016
0.036 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Gas 23
7415. 11930. 19345. 57.08 92.28 149.37 1.345 2.472
3.817 0.000 0.000 7.927 2.162
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
41. 31. 71. 0.25 0.19 0.44 0.045 0.034
0.079 0.000 0.004 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
    7614.      6203.     13817.    81.48    66.45   147.93    12.212    9.956
22.167      21.450       0.614        14.453         3.942
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
    2250.      3941.      6191.    22.58    39.87    62.45     0.565    1.004
 1.568      31.225       0.055         6.025         1.643
Total Ret.ExistScrub & SCR           41
    9597.      7979.     17576.    98.59    81.94   180.53     2.465    2.049
 4.513      30.307       0.393        17.572         4.792
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
    4582.      3639.      8221.    48.61    38.61    87.22     1.215    0.965
 2.180       5.579       0.134         8.240         2.247
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                   66
       0.       1662.       1662.      0.00     16.19     16.19      0.000     1.220
 1.220       0.000       0.000          0.859          0.234
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret. Biomass Cofiring          69
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CT Early Retirement            70
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CC Early Retirement            71
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total O/G Early Retirement           72
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Coal Early Retirement          73
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

Total Nuke Early Retirement 74
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total ERCT
163027. 169733. 332760. 1422.05 1515.37 2937.42 70.597 91.289 1
61.885 243.652 2.442 175.117 47.759

(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2015, Region: MACE (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
1241. 826. 2066. 12.55 8.35 20.91 2.052 1.365
3.417 2.441 0.044 1.947 0.531
Total Scrubbed Coal 2
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal_NOx 3
4828. 3358. 8185. 48.84 33.72 82.56 5.482 3.788
9.271 45.406 0.157 7.688 2.097
Total Unscrubbed Coal 4
992. 788. 1781. 10.13 8.05 18.18 1.959 1.556
3.514 10.001 0.025 1.693 0.462
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
39871. 29287. 69158. 423.82 311.50 735.32 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
2346. 1770. 4115. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
11369. 8611. 19979. 88.24 67.65 155.89 1.728 1.418
3.146 0.000 0.000 8.273 2.256
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
222. 544. 766. 2.44 6.00 8.44 0.104 0.273
0.377 0.000 0.000 0.448 0.122
Total Biomass 12
266. 194. 459. 2.18 1.59 3.76 0.022 0.016

0.038 0.150 0.001 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
601. 438. 1038. 6.28 4.59 10.87 0.772 0.564
1.337 0.000 0.000 0.000 0.000
Total Wind 15
219. 113. 332. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
31. 8. 38. 0.23 0.06 0.29 0.046 0.011
0.057 0.000 0.000 0.015 0.004
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
1133. 893. 2026. 12.46 9.83 22.29 0.000 0.000
0.000 0.000 0.791 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
276. 199. 474. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
32. 26. 59. 0.29 0.23 0.52 0.058 0.047
0.104 0.286 0.001 0.048 0.013
Total Cgn_Gas 23
5088. 3720. 8808. 38.14 28.19 66.33 1.410 0.989
2.398 0.000 0.000 3.520 0.960
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                  37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub          38
     813.       645.      1458.     8.63     6.85    15.48     0.211    0.168
 0.379       0.681       0.014         1.442         0.393
Total Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                       40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR          41
    2411.      1915.      4326.    24.06    19.11    43.18     0.602    0.478
 1.079       3.277       0.040         4.021         1.097
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
     741.       598.      1339.     6.32     5.10    11.43     0.158    0.128
 0.286       0.503       0.011         1.064         0.290
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
    5155.      4094.      9248.    48.30    38.36    86.67     1.579    1.254
 2.834       9.533       0.080         8.071         2.201
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MACE
   77632.     58026.    135658.   732.92   549.18  1282.11    16.183   12.055
28.238      72.280       1.164        38.230        10.426
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
```

neration

NOx
SO2 MER CO2 Carbon
Year: 2015, Region: MACW (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
4856. 3856. 8712. 45.81 36.39 82.20 0.701 0.556
1.257 6.960 0.058 7.655 2.088
Total Scrubbed Coal 2
133. 88. 221. 1.38 0.92 2.30 0.277 0.184
0.461 0.414 0.006 0.214 0.058
Total Unscrubbed Coal_NOx 3
473. 201. 674. 4.71 2.00 6.71 0.881 0.374
1.255 3.692 0.011 0.625 0.170
Total Unscrubbed Coal 4
3724. 2328. 6052. 37.12 23.17 60.29 7.632 4.758
12.390 37.721 0.118 5.614 1.531
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
14933. 9678. 24611. 158.92 103.19 262.11 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
1512. 632. 2144. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
5422. 4159. 9581. 40.66 31.19 71.86 0.407 0.312
0.719 0.000 0.000 3.813 1.040
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
25. 116. 140. 0.27 1.26 1.53 0.011 0.051
0.061 0.000 0.000 0.081 0.022
Total Biomass 12
74. 57. 131. 0.68 0.53 1.20 0.007 0.005
0.012 0.048 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
4. 3. 8. 0.06 0.05 0.11 0.008 0.006
0.013 0.000 0.000 0.000 0.000
Total Wind 15
17. 10. 27. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
     525.       414.       938.     5.77     4.55    10.32     0.000    0.000
 0.000       0.000       0.336         0.000         0.000
Total Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
     243.       175.       418.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
    1848.      1242.      3089.    16.47    10.83    27.30     3.105    2.011
 5.116      12.201       0.062         2.542         0.693
Total Cgn_Gas                        23
     114.       189.       303.     1.06     1.81     2.88     0.096    0.149
 0.245       0.000       0.000         0.153         0.042
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
     156.       121.       277.     0.83     0.64     1.48     0.004    0.003
 0.007       0.027       0.007         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
     268.       213.       480.     2.55     2.03     4.58     0.481    0.382
 0.863       0.201       0.001         0.426         0.116
```

```
Total Ret.ExistSCR & Scrub          38
   11129.      8839.     19967.   104.72    83.17   187.90      2.560    2.033
 4.593      23.487       0.225       17.498         4.772
Total Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.SCR                       40
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistScrub & SCR          41
    7574.      6016.     13590.    70.28    55.81   126.09      1.757    1.395
 3.152       5.655       0.116       11.742         3.202
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.SCR+Scrb                  44
   13302.     10565.     23868.   128.73   102.24   230.98      3.218    2.556
 5.774      14.444       0.193       21.509         5.866
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistScrub&ACI            50
     405.       327.       731.     4.41     3.56     7.96      0.883    0.713
 1.596       2.102       0.007        0.741         0.202
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00      0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MACW
   66735.     49227.    115962.   624.45   463.34  1087.80    22.027   15.488
37.515     106.953       1.140        72.614        19.804
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: MACS     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
```

```
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx            3
    1321.       805.      2126.    13.48     8.22    21.70     3.411    2.079
 5.490      16.275       0.015         2.021         0.551
Total Unscrubbed Coal                4
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
    8494.      5572.     14066.    92.30    60.55   152.85     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
      43.        16.        59.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    1588.       866.      2454.    11.35     6.43    17.77     0.138    0.120
 0.258       0.000       0.000         0.943         0.257
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
     777.      1305.      2082.     7.11    14.18    21.29     0.360    0.760
 1.120       0.000       0.000         1.130         0.308
Total Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
      18.        14.        32.     0.24     0.19     0.43     0.030    0.023
 0.053       0.000       0.000         0.000         0.000
Total Wind                          15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
     242.       191.       434.     2.67     2.10     4.77     0.000    0.000
 0.000       0.000       0.169         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Pump Storage                    20
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                         23
     186.       143.       329.      1.83     1.40     3.23     0.073    0.056
 0.129       0.000       0.000         0.172         0.047
Total Cgn_Oil                         24
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
     234.       181.       415.      0.98     0.76     1.74     0.000    0.000
 0.000       0.000       0.062         0.000         0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                   27
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                 28
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                        29
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                         30
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                       32
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                 33
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                     34
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                      35
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                   36
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                    37
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub            38
    6562.      5212.     11773.     65.99    52.41   118.40     1.512    1.201
 2.712       8.549       0.069        11.026         3.007
Total Ret.ExistSNCR & Scrub           39
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                         40
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR            41
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                        42
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR           43
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                    44
   10271.      8158.      18429.    96.77    76.86   173.62     2.908    2.310
 5.218       8.411       0.142        16.168         4.410
Total Ret.SNCR+Scrub                  45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                  46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR             47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub             48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                         49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI              50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI                51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI               52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                   53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR          54
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                  55
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR         56
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                  57
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub          58
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub         59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI    60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI     61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI     62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI           63
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MACS
   29737.     22461.     52198.   292.72   223.09   515.81     8.432    6.548
14.981      33.235       0.458        31.459         8.580
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: WUMS     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Scrubbed Coal                    2
     552.       415.       967.     6.07     4.54    10.61     0.940    0.703
 1.643       4.275       0.008        0.988         0.269
Total Unscrubbed Coal_NOx              3
     285.       226.       511.     3.06     2.43     5.49     0.685    0.544
 1.230       1.878       0.012        0.530         0.144
Total Unscrubbed Coal                  4
   16531.     12695.     29226.   171.52   131.54   303.05    28.455   21.781
50.235     125.049       0.667       28.931         7.890
Total Oil/Gas Steam                    5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Oil/Gas Steam_Nox                6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Nuclear                          7
    6473.      4940.     11413.    68.66    52.63   121.29     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Hydro                            8
    1007.       676.      1683.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Comb.Cycle Gas                   9
    2290.      1323.      3613.    17.05    10.02    27.07     0.434    0.302
 0.736       0.000       0.000        1.437         0.392
Total IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Turbine                         11
    1696.      1007.      2703.    15.07     9.54    24.61     0.727    0.440
 1.167       0.000       0.000        1.306         0.356
Total Biomass                         12
      52.        40.        92.     0.42     0.32     0.74     0.004    0.003
 0.007       0.030       0.000        0.000         0.000
Total Geothermal                      13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Landfill Gas                    14
     194.       143.       337.     2.17     1.60     3.77     0.267    0.197
 0.464       0.000       0.000        0.000         0.000
Total Wind                            15
      20.        11.        32.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Solar                           17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Non Fossil_Other                18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Fossil_Other                    19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Pump Storage                    20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Cgn_Coal                        22
      61.        49.       110.     0.51     0.41     0.92     0.094    0.076
 0.171       0.459       0.003        0.089         0.024
Total Cgn_Gas                         23
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Oil                        24
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                 26
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
    3042.       2207.       5249.    31.19    22.51    53.70     0.780    0.563
 1.342      22.644       0.169         5.181         1.413
Total Ret.ExistScrub & SCR           41
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
     747.        593.       1340.     8.74     6.94    15.68     1.332    1.058
 2.391       7.838       0.004         1.460         0.398
Total Ret.ExistScrub & SNCR          43
     219.        169.        389.     2.28     1.76     4.04     0.593    0.458
 1.052       1.153       0.007         0.377         0.103
Total Ret.SCR+Scrb                   44
    5524.       4388.       9912.    56.59    44.95   101.54     1.415    1.124
 2.538       4.275       0.179         9.796         2.672
Total Ret.SNCR+Scrub                 45
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Gas Reburn                 46
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                        49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI               51
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuke Early Retirement 74
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total WUMS
38694. 28882. 67576. 383.33 289.18 672.51 35.727 27.249
62.976 167.599 1.048 50.093 13.662

(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2015, Region: MANO (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
249. 198. 447. 2.49 1.97 4.46 0.257 0.204
0.460 0.557 0.001 0.415 0.113
Total Scrubbed Coal 2
813. 646. 1459. 9.14 7.26 16.41 2.491 1.978
4.470 6.680 0.035 1.528 0.417
Total Unscrubbed Coal_NOx 3
1212. 806. 2018. 11.83 7.87 19.71 1.745 1.161
2.907 6.700 0.062 1.901 0.519
Total Unscrubbed Coal 4
35811. 23553. 59364. 359.87 236.55 596.43 49.069 32.322
81.391 257.626 1.238 56.758 15.479
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   59882.     44708.    104589.   631.89   471.36  1103.25     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    1079.       747.      1826.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    3241.      1729.      4970.    24.33    13.01    37.33     0.245    0.135
 0.380       0.000       0.000         1.981         0.540
Total IGCC                          10
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
     285.      2270.      2555.     3.10    24.75    27.85     0.131    1.023
 1.154       0.000       0.000         1.478         0.403
Total Biomass                       12
       4.          3.          8.     0.03     0.03     0.06     0.000    0.000
 0.001       0.002       0.000         0.000         0.000
Total Geothermal                    13
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
     170.       130.       300.     2.32     1.77     4.09     0.285    0.218
 0.503       0.000       0.000         0.000         0.000
Total Wind                          15
      88.        49.       137.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
      93.        73.       166.     1.02     0.80     1.82     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       9.         7.        16.     0.10     0.08     0.17     0.020    0.016
 0.036       0.000       0.000         0.000         0.000
Total Pump Storage                  20
     197.       142.       339.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
      44.        29.        72.     0.33     0.23     0.56     0.004    0.004
 0.009       0.000       0.000         0.030         0.008
Total Cgn_Oil                       24
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                26
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
    2730.      2169.      4899.    27.04    21.47    48.51     3.961    3.146
 7.107       4.000       0.060         4.518         1.232
Total Ret.ExistSCR & Scrub           38
    2251.      1788.      4039.    23.53    18.69    42.22     0.859    0.682
 1.541       5.277       0.017         3.931         1.072
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
    6446.      4418.     10864.    66.66    45.56   112.22     2.317    1.571
 3.888      53.611       0.166        10.520         2.869
Total Ret.ExistScrub & SCR           41
    3013.      2393.      5406.    30.95    24.58    55.53     0.902    0.717
 1.619       9.837       0.018         5.171         1.410
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
   25247.     20052.     45299.   257.90   204.83   462.72     7.747    6.153
13.900      45.653       0.173        43.090        11.752
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MANO
  142864.    105909.    248773.  1452.52  1080.81  2533.33    70.035   49.330  1
19.365     389.944       1.769       131.321        35.815
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: MAPP     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
   24068.     18592.     42661.   260.88   201.49   462.37    51.370   39.170
90.539      85.350       1.230        44.742        12.202
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
   31911.     23200.     55111.   338.39   245.66   584.05    69.560   51.093  1
20.653     256.249       1.304        55.762        15.208
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
   15199.     11979.     27178.   162.83   128.08   290.91     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
    5412.      4577.      9989.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                9
```

1704.	1283.	2987.	12.92	9.84	22.76	0.174	0.151	0.324	0.000	0.000	1.208	0.329
Total IGCC												
0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Turbine												
273.	1092.	1366.	2.90	12.33	15.23	0.130	0.566	0.697	0.000	0.000	0.808	0.220
Total Biomass												
706.	546.	1252.	5.72	4.42	10.14	0.057	0.044	0.101	0.405	0.003	0.000	0.000
Total Geothermal												
0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Landfill Gas												
49.	38.	87.	0.67	0.51	1.18	0.083	0.063	0.146	0.000	0.000	0.000	0.000
Total Wind												
1498.	837.	2336.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Fuel Cell												
0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Solar												
0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Non Fossil_Other												
150.	118.	268.	1.65	1.30	2.95	0.000	0.000	0.000	0.000	0.105	0.000	0.000
Total Fossil_Other												
0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Pump Storage												
0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Int. Imports												
1.	1.	2.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Cgn_Coal												
312.	252.	563.	2.79	2.25	5.03	0.706	0.570	1.276	1.283	0.009	0.469	0.128
Total Cgn_Gas												
7.	16.	23.	0.08	0.17	0.25	0.003	0.007	0.011	0.000	0.000	0.013	0.004
Total Cgn_Oil												
0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Cgn_Other												
9.	7.	15.	0.04	0.03	0.06	0.000	0.000	0.000	0.000	0.002	0.000	0.000
Total NonCG IPP_Coal												
0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total NonCG IPP_Gas												
0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total NonCG IPP_Other												
0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Blr_Coal												
0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Blr_Gas												
0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000

```
Total Blr_Oil                          31
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Other                        32
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total SteamOnly Cogen                  33
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-CC                      34
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.O/G-CC                       35
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-IGCC                    36
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Scrubber                     37
    6176.      4905.     11081.     70.44     55.95    126.39     25.997    20.647
46.643       7.331       0.356         12.349          3.368
Total Ret.ExistSCR & Scrub             38
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR & Scrub            39
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR                          40
   12716.      8954.     21671.    130.33     91.77    222.10      3.566     2.499
 6.064      96.623       0.507         21.192          5.780
Total Ret.ExistScrub & SCR             41
    3615.      2871.      6486.     35.96     28.56     64.51      0.899     0.714
 1.613       6.593       0.106          6.224          1.698
Total Ret.SNCR                         42
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SNCR            43
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR+Scrb                     44
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR+Scrub                   45
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Gas Reburn                   46
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR              47
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub              48
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                          49
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI               50
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI                 51
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI                52
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
```

0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuke Early Retirement 74

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MAPP
  103807.     79267.    183074.  1025.59   782.35  1807.93   152.543  115.524  2
68.067     453.834       3.623       142.768        38.937
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: UPNY     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
    3453.      2742.      6195.    31.97    25.39    57.35     0.671    0.533
 1.204       6.333       0.053         5.341         1.457
Total Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx            3
    1502.      1193.      2696.    14.92    11.85    26.77     1.768    1.404
 3.171      14.721       0.044         2.492         0.680
Total Unscrubbed Coal                4
    3843.      3052.      6895.    39.73    31.55    71.28     8.023    6.372
14.395      44.163       0.205         6.638         1.810
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   12775.     11229.     24005.   133.92   117.80   251.72     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
   15534.     10355.     25889.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
      16.         5.        22.     0.18     0.06     0.24     0.017    0.005
 0.022       0.000       0.000         0.013         0.003
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
      12.         9.        21.     0.13     0.10     0.22     0.005    0.004
 0.009       0.000       0.000         0.012         0.003
Total Biomass                       12
      78.        60.       138.     0.72     0.56     1.28     0.007    0.006
 0.013       0.051       0.000         0.000         0.000
```

Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
27. 20. 47. 0.37 0.28 0.65 0.045 0.034
0.079 0.000 0.000 0.000 0.000
Total Wind 15
87. 49. 136. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
5. 3. 8. 0.03 0.03 0.06 0.007 0.005
0.012 0.000 0.000 0.003 0.001
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
150. 118. 268. 1.65 1.30 2.95 0.000 0.000
0.000 0.000 0.105 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
2. 1. 3. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
704. 568. 1273. 5.84 4.71 10.55 0.922 0.744
1.666 3.166 0.017 0.983 0.268
Total Cgn_Gas 23
7305. 3352. 10657. 59.81 27.31 87.12 5.428 2.488
7.916 0.000 0.000 4.623 1.261
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
191. 147. 338. 2.55 1.97 4.52 0.000 0.000
0.000 0.000 0.160 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                    35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                 36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                  37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub          38
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub         39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                       40
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR          41
     618.        491.       1110.     5.85     4.64    10.49     0.146    0.116
 0.262       0.462       0.010         0.977         0.266
Total Ret.SNCR                      42
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
    3246.       2578.       5825.    34.47    27.38    61.85     0.862    0.684
 1.546       2.721       0.057         5.759         1.571
Total Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring          69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement            70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement            71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement           72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement          73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement          74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total UPNY
   49549.     35976.     85524.   332.13   254.92   587.05    17.901   12.396
30.297      71.617       0.651        26.842         7.320
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: DSNY     (Emissions By Plant Type)
             Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
    3063.      2327.      5390.    31.73    24.06    55.79     5.923    4.493
10.417      28.477       0.092         5.196         1.417
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
    2820.      3469.      6289.    28.53    35.10    63.63     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    1237.       824.      2061.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    8224.      6343.     14567.    61.76    47.76   109.52     0.639    0.526
 1.164       0.000       0.000         5.813         1.585
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       0.         1.         1.     0.00     0.01     0.01     0.000    0.001
 0.001       0.000       0.000         0.001         0.000
Total Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Wind                          15
      29.        16.        45.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Solar                          17
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
     361.        285.        646.     3.98     3.14     7.11     0.000    0.000
 0.000       0.000       0.252         0.000         0.000
Total Fossil_Other                   19
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
      92.        155.        247.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                        23
     890.        269.       1159.     8.39     2.53    10.92     0.784    0.237
 1.021       0.000       0.000         0.580         0.158
Total Cgn_Oil                        24
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
      30.         23.         54.     0.13     0.10     0.23     0.000    0.000
 0.000       0.000       0.008         0.000         0.000
Total NonCG IPP_Coal                 26
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
```

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total DSNY
   16747.     13713.     30460.   134.52   112.70   247.22     7.346    5.257
12.603      28.477       0.353        11.588         3.160
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: NYC      (Emissions By Plant Type)
             Generation                    Trillion                  Emission
        Emission    Emission      Emission       Emission
```

```
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam                  5
       0.      3697.      3697.     0.00    35.27    35.27     0.000    2.416
 2.416       0.000       0.000         1.872         0.510
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    6094.      3594.      9688.    44.01    26.13    70.14     0.788    0.529
 1.317       0.000       0.000         3.722         1.015
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
     457.       139.       597.     5.43     1.71     7.13     0.263    0.088
 0.351       0.000       0.000         0.379         0.103
Total Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Wind                          15
      27.        15.        41.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                        23
     124.        97.       222.     1.13     0.88     2.01     0.105    0.082
 0.187       0.000       0.000         0.107         0.029
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.SNCR                        42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR           43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                    44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                  45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                  46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR             47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub             48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI              50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI                51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI               52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                   53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR          54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                  55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR         56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                  57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub          58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub         59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI    60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI     61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI     62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI           63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NYC
    6702.      7542.     14245.    50.57    63.99   114.55     1.156    3.114
 4.270       0.000       0.000         6.079         1.658
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: LILC     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    9661.      6994.     16655.    68.60    49.68   118.28     0.770    0.561
 1.331       0.000       0.000         6.277         1.712
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
     288.       472.       760.     3.15     5.80     8.95     0.127    0.302
 0.428       0.000       0.000         0.475         0.129
Total Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Wind                          15
      16.         9.        25.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
     604.       476.      1080.     6.64     5.24    11.88     0.000    0.000
 0.000       0.000       0.355         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
     277.       275.       552.     2.27     2.38     4.65     0.203    0.215
 0.418       0.000       0.000         0.247         0.067
```

```
Total Cgn_Oil                          24
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Cgn_Other                        25
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total NonCG IPP_Coal                   26
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total NonCG IPP_Gas                    27
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total NonCG IPP_Other                  28
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Coal                         29
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Gas                          30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Oil                          31
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Other                        32
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total SteamOnly Cogen                  33
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-CC                      34
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.O/G-CC                       35
    1441.      1105.      2547.     10.41      7.98     18.39      0.104     0.080
 0.184       0.000       0.000          0.976          0.266
Total Rep.Coal-IGCC                    36
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Scrubber                     37
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR & Scrub             38
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR & Scrub            39
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR                          40
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SCR             41
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR                         42
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SNCR            43
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR+Scrb                     44
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR+Scrub                   45
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                  46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR             47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub             48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                         49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI              50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI                51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI               52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                   53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR          54
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                  55
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR         56
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                  57
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub          58
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub         59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI    60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI     61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI     62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI           63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI          64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                     65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                    66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)     67
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total LILC
   12288.      9331.     21619.    91.07    71.08   162.14     1.203    1.158
 2.361       0.000       0.355         7.974         2.175
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: NENG     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
     324.       257.       581.     3.37     2.68     6.04     0.339    0.269
 0.607       0.332       0.019         0.563         0.153
Total Scrubbed Coal                 2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx           3
     716.       415.      1131.     7.41     4.30    11.71     0.903    0.529
 1.432       6.442       0.019         1.091         0.297
Total Unscrubbed Coal               4
     491.       390.       880.     4.77     3.79     8.57     0.622    0.494
 1.116       4.712       0.015         0.798         0.218
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Oil/Gas Steam_Nox                6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                          7
   20418.     14268.     34685.   206.28   144.13   350.41     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                            8
    3489.      1724.      5212.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                   9
   41084.     29049.     70133.   311.42   220.71   532.14     4.717    3.404
 8.121       0.000       0.000        28.241         7.702
Total IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                         11
     107.       199.       306.     1.13     2.16     3.29     0.050    0.091
 0.141       0.000       0.000         0.175         0.048
Total Biomass                         12
     734.       530.      1264.     6.61     4.76    11.37     0.066    0.048
 0.114       0.455       0.003         0.000         0.000
Total Geothermal                      13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                    14
     707.       513.      1220.     7.36     5.36    12.72     0.905    0.659
 1.564       0.000       0.000         0.000         0.000
Total Wind                            15
     865.       444.      1309.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                       16
       3.         2.         5.     0.03     0.01     0.04     0.005    0.002
 0.007       0.000       0.000         0.002         0.001
Total Solar                           17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
    2367.      1867.      4234.    26.04    20.53    46.57     0.000    0.000
 0.000       0.000       1.647         0.000         0.000
Total Fossil_Other                    19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                    20
     405.       292.       697.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
    4905.      3540.      8445.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
     308.       248.       556.     2.63     2.12     4.75     0.566    0.456
 1.022       2.614       0.012         0.443         0.121
Total Cgn_Gas                         23
     966.       861.      1827.     8.23     7.26    15.49     0.465    0.414
 0.879       0.000       0.000         0.822         0.224
Total Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
     429.       199.       628.     2.85     1.07     3.92     0.027    0.009
 0.036       0.144       0.010         0.000         0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                   27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                 28
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                        29
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                         30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                         31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                       32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                 33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                     34
     955.        732.       1687.     6.89     5.29    12.18     0.069    0.053
 0.122       0.000       0.000         0.646         0.176
Total Rep.O/G-CC                      35
      59.         45.        104.     0.43     0.33     0.75     0.004    0.003
 0.008       0.000       0.000         0.040         0.011
Total Rep.Coal-IGCC                   36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                    37
     417.        332.        749.     4.11     3.26     7.37     0.485    0.385
 0.870       0.162       0.006         0.686         0.187
Total Ret.ExistSCR & Scrub            38
    1759.       1397.       3157.    17.34    13.77    31.11     0.858    0.682
 1.540       1.369       0.029         2.897         0.790
Total Ret.ExistSNCR & Scrub           39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                         40
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR            41
     789.        637.       1426.     7.64     6.16    13.80     0.191    0.154
 0.345       0.759       0.013         1.285         0.351
Total Ret.SNCR                        42
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR           43
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                    44
    5571.       4424.       9995.    53.23    42.27    95.50     1.331    1.057
 2.387       3.921       0.079         8.893         2.425
Total Ret.SNCR+Scrub                  45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                  46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR             47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub             48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                         49
```

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NENG
   87866.     62364.    150231.   677.76   489.97  1167.73    11.602    8.710
20.313      20.909       1.853        46.581        12.704
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: FRCC     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
    8931.      7093.     16024.    86.61    68.78   155.39     4.806    3.817
 8.623      14.398       0.057        14.470         3.946
Total Scrubbed Coal                 2
     726.       577.      1303.     7.63     6.06    13.68     1.252    0.994
 2.246       3.585       0.012         1.274         0.347
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    1287.      1022.      2308.    13.20    10.48    23.68     2.348    1.865
 4.213      11.841       0.035         2.205         0.601
Total Oil/Gas Steam                 5
       0.      1756.      1756.     0.00    17.44    17.44     0.000    2.128
 2.128       0.000       0.000         0.926         0.252
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
   17962.     13864.     31827.   196.49   151.76   348.26     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
      83.        38.       121.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                9
   38779.     38236.     77015.   301.00   297.99   598.99     7.751    7.858
```

15.609 0.000 0.000 31.789 8.670
Total IGCC 10
1083. 837. 1921. 7.88 6.09 13.97 0.394 0.305
0.699 0.000 0.003 1.301 0.355
Total Turbine 11
1323. 5462. 6786. 14.51 60.79 75.30 0.597 2.605
3.202 0.000 0.000 3.996 1.090
Total Biomass 12
234. 181. 415. 2.16 1.67 3.83 0.022 0.017
0.038 0.153 0.001 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
9. 7. 16. 0.12 0.09 0.22 0.015 0.011
0.026 0.000 0.000 0.000 0.000
Total Wind 15
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
1869. 1474. 3343. 20.56 16.21 36.77 0.000 0.000
0.000 0.000 1.120 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Gas 23
598. 1622. 2220. 5.42 14.85 20.28 0.361 0.996
1.357 0.000 0.000 1.076 0.293
Total Cgn_Oil 24
0. 29. 29. 0.00 0.25 0.25 0.000 0.037
0.037 0.000 0.000 0.013 0.004
Total Cgn_Other 25
360. 278. 638. 2.99 2.31 5.30 0.023 0.017
0.040 0.160 0.001 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
   13210.     10133.     23344.    95.38    73.16   168.54     0.954    0.732
 1.685       0.000       0.000         8.945         2.439
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
    6100.      4879.     10979.    59.00    47.19   106.18     1.475    1.180
 2.655      53.092       0.158         9.888         2.697
Total Ret.ExistScrub & SCR           41
   18560.     14740.     33300.   182.91   145.27   328.18     4.630    3.677
 8.308      80.277       0.121        30.561         8.335
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
    5664.      4498.     10162.    54.04    42.92    96.96     1.378    1.094
 2.472      12.120       0.039         9.029         2.462
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuke Early Retirement 74
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000

Total FRCC
116778. 106728. 223506. 1049.90 963.33 2013.23 26.005 27.333
53.339 175.626 1.546 115.474 31.493

(**) Industrial Boiler Generation in BBtu, not included in the total regional generation

---

Year: 2015, Region: VACA (Emissions By Plant Type)

	Generation (GWh)			Trillion (Btu)			NOx Emission (1000 Tons)			SO2 Emission (1000 Tons)			MER Emission (Tons)			CO2 Emission (Mil Tonnes)			Carbon Emission (Mil Tonnes)		
	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total
Total Scrubbed Coal_NOx	1	18838.	14961.	33799.	183.88	146.04	329.91	5.856	4.651	10.507	21.200	0.119		30.722		8.379					
Total Scrubbed Coal	2	2743.	2179.	4922.	28.53	22.66	51.19	3.361	2.669	6.030	4.389	0.034		4.767		1.300					
Total Unscrubbed Coal_NOx	3	9991.	7418.	17409.	99.07	73.44	172.51	8.709	6.271	14.980	94.882	0.274		16.065		4.381					
Total Unscrubbed Coal	4	12900.	9555.	22455.	132.31	98.03	230.34	24.904	18.730	43.635	124.883	0.417		21.450		5.850					
Total Oil/Gas Steam	5	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000		0.000		0.000					
Total Oil/Gas Steam_Nox	6	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000		0.000		0.000					
Total Nuclear	7	69531.	54252.	123783.	711.26	555.45	1266.71	0.000	0.000	0.000	0.000	0.000		0.000		0.000					
Total Hydro	8	6437.	3139.	9575.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000		0.000		0.000					
Total Comb.Cycle Gas	9	10681.	8546.	19227.	78.40	65.65	144.05	1.154	1.576	2.730	0.000	0.000		7.645		2.085					
Total IGCC	10	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000		0.000		0.000					
Total Turbine	11	1465.	3817.	5282.	13.26	36.80	50.06	0.630	1.670	2.299	0.000	0.000		2.656		0.724					
Total Biomass	12	204.	157.	361.	1.88	1.45	3.33	0.019	0.015	0.033	0.133	0.001		0.000		0.000					
Total Geothermal	13																				

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                   14
     112.        85.       197.     1.53     1.16     2.69     0.188    0.143
 0.331       0.000       0.000         0.000         0.000
Total Wind                           15
      20.        11.        31.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                      16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
     617.       487.      1104.     6.79     5.35    12.14     0.000    0.000
 0.000       0.000       0.431         0.000         0.000
Total Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
    1953.      1410.      3363.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
    3882.      3133.      7015.    33.49    27.02    60.51     6.222    5.022
11.244      29.672       0.111         5.635         1.537
Total Cgn_Gas                        23
    3074.      2197.      5271.    22.95    16.83    39.78     0.614    0.419
 1.032       0.000       0.000         2.111         0.576
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
     191.       147.       338.     1.44     1.11     2.55     0.013    0.010
 0.022       0.089       0.012         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
23867. 18956. 42823. 227.77 180.90 408.68 4.837 3.841
8.678 29.611 0.254 38.057 10.379
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
2417. 1920. 4337. 24.81 19.70 44.51 0.665 0.528
1.194 24.482 0.074 4.145 1.130
Total Ret.ExistScrub & SCR 41
1121. 890. 2011. 11.07 8.79 19.86 0.315 0.251
0.566 1.400 0.005 1.850 0.504
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
22140. 17594. 39734. 212.36 168.76 381.12 5.320 4.228
9.548 12.255 0.108 35.491 9.679
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring          69
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement            70
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement            71
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement           72
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement          73
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement          74
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total VACA
  192183.    150854.    343037.  1790.77  1429.17  3219.94    62.806   50.024  1
12.830     342.996       1.840       170.594        46.526
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: TVA      (Emissions By Plant Type)
             Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
   24905.     19780.     44685.   243.93   193.74   437.67     8.535    6.779
15.314      54.709       0.176        40.757        11.116
Total Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx            3
    9039.      7179.     16218.    88.00    69.89   157.88     2.360    1.874
 4.234      84.159       0.313        14.703         4.010
Total Unscrubbed Coal                4
   12923.     10263.     23186.   133.54   106.06   239.60    24.822   19.714
44.535     122.291       0.277        22.312         6.085
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   32851.     25702.     58553.   341.49   266.95   608.44     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
   11469.      6255.     17724.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    6771.      5677.     12448.    50.78    42.58    93.36     0.508    0.426
 0.934       0.000       0.000         4.955         1.351
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       0.      1096.      1096.     0.00    12.00    12.00     0.000    0.485
 0.485       0.000       0.000         0.637         0.174
Total Biomass                       12
       4.         3.         8.     0.04     0.03     0.07     0.000    0.000
 0.001       0.003       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       9.         7.        16.     0.12     0.09     0.22     0.015    0.011
 0.026       0.000       0.000         0.000         0.000
Total Wind                          15
       2.         1.         3.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
      53.        42.        95.     0.58     0.46     1.04     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
     316.       687.      1003.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                        23
    2601.      2048.      4649.    19.51    15.54    35.05     0.195    0.173
 0.368       0.000       0.000         1.860         0.507
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
    5469.      4343.      9812.    51.67    41.04    92.70     1.033    0.820
```

```
 1.853      11.588       0.037         8.633         2.354
Total Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                       40
    2341.      1859.      4200.    24.52    19.48    44.00     0.613    0.487
 1.100      21.998       0.058         4.097         1.117
Total Ret.ExistScrub & SCR          41
     515.       409.       923.     5.48     4.35     9.83     0.137    0.109
 0.246       2.950       0.002         0.916         0.250
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
    6858.      5447.     12306.    68.85    54.68   123.53     1.721    1.367
 3.088       5.332       0.036        11.503         3.137
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total TVA
  116127.     90798.    206925.  1028.50   826.88  1855.39    39.939   32.245
72.184     303.029       0.899       110.372        30.101
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: SOU      (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
```

	(GWh)			(Btu)			(1000 Tons)	
	(1000 Tons)		(Tons)	(Mil Tonnes)		(Mil Tonnes)		
	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
Total Scrubbed Coal_NOx	1							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Scrubbed Coal	2							
	423.	336.	760.	4.90	3.90	8.80	0.839	0.666
	1.505	0.271	0.008	0.820		0.224		
Total Unscrubbed Coal_NOx	3							
	5565.	4420.	9985.	52.53	41.72	94.24	0.867	0.688
	1.555	47.121	0.124	8.776		2.393		
Total Unscrubbed Coal	4							
	19243.	16030.	35274.	191.62	160.62	352.24	33.796	28.405
	62.201	187.942	0.549	32.801		8.946		
Total Oil/Gas Steam	5							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Oil/Gas Steam_Nox	6							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Nuclear	7							
	27106.	20888.	47993.	296.09	228.26	524.35	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Hydro	8							
	6138.	2706.	8844.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Comb.Cycle Gas	9							
	52971.	37058.	90029.	397.42	278.08	675.51	4.149	2.908
	7.057	0.000	0.000	35.849		9.777		
Total IGCC	10							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Turbine	11							
	375.	5673.	6047.	3.46	57.91	61.37	0.161	2.461
	2.623	0.000	0.000	3.257		0.888		
Total Biomass	12							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Geothermal	13							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Landfill Gas	14							
	40.	31.	71.	0.55	0.42	0.97	0.068	0.052
	0.119	0.000	0.000	0.000		0.000		
Total Wind	15							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Fuel Cell	16							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Solar	17							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Non Fossil_Other	18							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Fossil_Other	19							
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000		0.000		
Total Pump Storage	20							
	292.	635.	927.	0.00	0.00	0.00	0.000	0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
       4.          3.          7.     0.04     0.03     0.07     0.007    0.006
 0.013       0.036       0.000         0.006         0.002
Total Cgn_Gas                         23
    6488.       4465.      10953.    49.57    34.34    83.91     0.809    0.565
 1.375       0.000       0.000         4.453         1.214
Total Cgn_Oil                         24
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
      22.         17.         38.     0.19     0.14     0.33     0.002    0.001
 0.003       0.013       0.000         0.000         0.000
Total NonCG IPP_Coal                  26
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                   27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                 28
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                        29
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                         30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                         31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                       32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                 33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                     34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                      35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                   36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                    37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub            38
   25150.      19975.      45125.   243.75   193.59   437.34     5.218    4.144
 9.362      32.878       0.232        40.726        11.107
Total Ret.ExistSNCR & Scrub           39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                         40
   13093.      10399.      23492.   124.44    98.84   223.28     3.365    2.673
 6.038     112.500       0.332        20.792         5.671
Total Ret.ExistScrub & SCR            41
    3619.       2874.       6493.    37.99    30.17    68.16     0.950    0.754
 1.704      16.849       0.023         6.348         1.731
Total Ret.SNCR                        42
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
   28093.     22312.     50405.   277.77   220.61   498.37     7.044    5.595
12.639      37.294       0.218        46.410        12.657
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuke Early Retirement 74
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total SOU
188622. 147822. 336445. 1680.32 1348.62 3028.93 57.274 48.919 1
06.194 434.904 1.486 200.238 54.610

(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2015, Region: ENTG (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Scrubbed Coal 2
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal_NOx 3
4814. 3824. 8638. 48.38 38.43 86.81 1.766 1.403
3.169 20.400 0.114 8.084 2.205
Total Unscrubbed Coal 4
14454. 11480. 25933. 147.93 117.49 265.43 22.748 18.067
40.815 103.076 0.773 25.465 6.945
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
24520. 18179. 42699. 272.03 201.81 473.83 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
646. 474. 1120. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
28877. 24389. 53267. 216.58 182.97 399.55 2.166 1.839
4.005 0.000 0.000 21.204 5.783
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
0. 117. 117. 0.00 1.28 1.28 0.000 0.051
0.051 0.000 0.000 0.068 0.019
Total Biomass 12
43. 33. 77. 0.40 0.31 0.71 0.004 0.003
0.007 0.028 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
27. 20. 47. 0.37 0.28 0.65 0.045 0.034
0.079 0.000 0.000 0.000 0.000
Total Wind 15
57. 32. 88. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
137. 108. 244. 1.50 1.19 2.69 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Gas 23
4175. 2828. 7003. 31.31 21.32 52.64 0.316 0.270
0.586 0.000 0.000 2.794 0.762
Total Cgn_Oil 24

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
     795.       607.      1402.     4.81     3.67     8.49     0.942    0.719
 1.661       0.021       0.083         0.000         0.000
Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other               28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                       31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                  37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                       40
    7343.      5832.     13175.    74.71    59.34   134.05     1.934    1.536
 3.470      44.733       0.421        12.933         3.527
Total Ret.ExistScrub & SCR          41
    2781.      2208.      4989.    27.95    22.19    50.14     0.699    0.555
 1.254       5.616       0.055         4.837         1.319
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
    3311.      2630.      5941.    36.32    28.85    65.17     0.908    0.721
 1.629       4.888       0.106         6.069         1.655
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total ENTG
   91980.     72760.    164740.   862.30   679.13  1541.43    31.528   25.198
56.726     178.763       1.553        81.454        22.215
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: SPPN     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
    4524.      3593.      8116.    43.72    34.72    78.45     0.464    0.369
 0.833       6.636       0.117         7.447         2.031
Total Scrubbed Coal                 2
   18584.     14665.     33249.   199.02   157.08   356.10    46.918   37.115
84.033      28.113       0.808        34.007         9.275
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    6942.      5312.     12254.    74.58    56.95   131.53    18.022   13.915
31.936      54.034       0.237        12.371         3.374
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                          7
    5668.      4084.      9752.    55.33    39.87    95.20     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                            8
     601.       418.      1020.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                   9
    2897.      2223.      5120.    21.73    16.67    38.40     0.217    0.167
 0.384       0.000       0.000         2.038         0.556
Total IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                         11
      21.      1636.      1658.     0.21    19.20    19.41     0.011    0.962
 0.974       0.000       0.000         1.030         0.281
Total Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                      13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                    14
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Wind                            15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                           17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                    19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                    20
      32.        37.        69.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                         23
       0.         8.         8.     0.00     0.08     0.08     0.000    0.003
 0.003       0.000       0.000         0.005         0.001
Total Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                   27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
    2352.      1868.      4220.    23.99    19.05    43.04     0.778    0.618
 1.396      21.521       0.084         4.058         1.107
Total Ret.ExistScrub & SCR           41
    4059.      3059.      7118.    41.37    31.01    72.39     1.034    0.775
 1.810      11.978       0.080         6.984         1.905
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total SPPN
   45681.     36903.     82584.   459.96   374.64   834.61    67.445   53.924  1
21.368     122.282       1.325        67.939        18.529
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: SPPS     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
    2158.      1714.      3872.    23.20    18.43    41.63     3.608    2.865
 6.473       2.768       0.088         4.016         1.095
Total Unscrubbed Coal_NOx           3
    2034.      1615.      3649.    21.76    17.28    39.03     4.938    3.922
 8.861      14.247       0.123         3.766         1.027
Total Unscrubbed Coal               4
   24942.     19810.     44752.   249.98   198.54   448.51    45.902   36.457
82.359     155.328       1.109        43.265        11.800
Total Oil/Gas Steam                 5
       0.      5723.      5723.     0.00    57.09    57.09     0.000    7.828
 7.828       0.000       0.000         3.030         0.826
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
    4702.      3448.      8150.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                9
   27209.     26927.     54136.   205.46   204.57   410.03     2.745    3.119
 5.864       0.000       0.000        21.760         5.935
```

```
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
     164.       384.       548.     1.79     4.75     6.54     0.073    0.223
 0.296       0.000       0.000         0.347         0.095
Total Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
      40.        31.        71.     0.55     0.42     0.97     0.068    0.052
 0.119       0.000       0.000         0.000         0.000
Total Wind                          15
      66.        37.       102.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
     101.        80.       181.     0.48     0.38     0.87     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.        43.        43.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
    1243.      1003.      2246.    10.63     8.57    19.20     2.067    1.668
 3.734       9.600       0.034         1.788         0.488
Total Cgn_Gas                       23
    4015.      3835.      7850.    30.36    30.38    60.74     0.357    0.668
 1.026       0.000       0.000         3.223         0.879
Total Cgn_Oil                       24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
     156.       121.       277.     0.66     0.51     1.17     0.001    0.001
 0.001       0.005       0.000         0.000         0.000
Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other               28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                       31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
   10511.      8348.      18859.   109.93    87.31   197.25     2.748    2.183
 4.931       5.917       0.050        18.368         5.009
Total Ret.SNCR+Scrub                 45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
```

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuke Early Retirement 74
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total SPPS
77342. 73117. 150458. 654.80 628.23 1283.03 62.507 58.985 1
21.492 187.866 1.403 99.564 27.154

(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2015, Region: CALI (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Scrubbed Coal 2
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal 4
710. 564. 1273. 7.79 6.19 13.97 0.802 0.637
1.438 6.987 0.029 1.301 0.355
Total Oil/Gas Steam 5
2503. 1950. 4453. 23.87 18.60 42.46 0.239 0.186
0.425 0.000 0.000 2.254 0.615
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
20241. 15089. 35329. 206.46 153.43 359.88 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
16750. 17655. 34405. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
61906. 46098. 108004. 449.88 336.08 785.96 4.545 3.393
7.938 0.000 0.000 41.711 11.376
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
167. 600. 767. 1.53 6.87 8.41 0.078 0.275
0.354 0.000 0.000 0.446 0.122
Total Biomass 12
1872. 1447. 3319. 17.09 13.21 30.30 0.171 0.132
0.303 1.212 0.009 0.000 0.000
Total Geothermal 13
11344. 8966. 20310. 291.69 230.53 522.21 0.000 0.000

0.000 0.000 0.775 0.000 0.000
Total Landfill Gas 14
966. 737. 1703. 12.24 9.34 21.58 1.506 1.148
2.654 0.000 0.000 0.000 0.000
Total Wind 15
4635. 2599. 7234. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
516. 274. 790. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
785. 619. 1403. 9.00 7.10 16.10 0.000 0.000
0.000 0.000 0.225 0.000 0.000
Total Fossil_Other 19
89. 68. 158. 0.98 0.75 1.73 0.064 0.049
0.114 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 428. 428. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
1356. 1094. 2450. 12.37 9.98 22.36 0.557 0.449
1.006 10.319 0.041 2.082 0.568
Total Cgn_Gas 23
23601. 13141. 36742. 200.69 105.84 306.52 3.916 1.704
5.620 0.000 0.000 16.267 4.437
Total Cgn_Oil 24
1741. 1124. 2864. 13.16 8.50 21.66 0.099 0.064
0.162 0.000 0.000 1.150 0.314
Total Cgn_Other 25
576. 444. 1020. 4.10 3.16 7.26 0.078 0.060
0.139 0.210 0.016 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35

```
   18946.     14532.     33478.   136.79   104.92   241.71     1.368    1.049
 2.417       0.000       0.000        12.828          3.498
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistSCR&ACI               51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
```

```
Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring          69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement            70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement            71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement           72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement          73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement          74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total CALI
  168703.    127429.    296133.  1387.64  1014.49  2402.13    13.423    9.147
22.570      18.728       1.093        78.039        21.283
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: PNW      (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                  2
    5561.      4417.      9978.    56.95    45.23   102.17    11.389    9.046
20.435       5.364       0.237         9.858         2.688
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
    2212.      1757.      3969.    23.92    19.00    42.93     5.280    4.194
 9.474      15.782       0.095         4.135         1.128
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
    5713.      3138.      8851.    57.49    31.58    89.07     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
   63340.     47747.    111087.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
   25259.     18849.     44108.   188.14   140.60   328.74     3.066    2.315
 5.381       0.000       0.000        17.446         4.758
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
    1931.      5271.      7201.    20.69    56.77    77.46     0.916    2.564
 3.481       0.000       0.000         4.111         1.121
Total Biomass                       12
      26.        20.        46.     0.21     0.16     0.37     0.002    0.002
 0.004       0.015       0.000         0.000         0.000
Total Geothermal                    13
      34.        27.        61.     1.10     0.87     1.97     0.000    0.000
 0.000       0.000       0.004         0.000         0.000
Total Landfill Gas                  14
      94.        72.       166.     1.28     0.98     2.26     0.158    0.120
 0.278       0.000       0.000         0.000         0.000
Total Wind                          15
     185.       104.       290.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
     256.       202.       457.     2.81     2.22     5.03     0.000    0.000
 0.000       0.000       0.102         0.000         0.000
Total Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
    7601.      5486.     13087.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                        23
    5024.      3854.      8878.    39.24    30.10    69.33     1.126    0.864
 1.989       0.000       0.000         3.680         1.004
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
     416.       321.       738.     3.55     2.75     6.30     0.036    0.027
 0.063       0.252       0.002         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
     421.       323.       744.     3.04     2.33     5.37     0.030    0.023
 0.054       0.000       0.000         0.285         0.078
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total PNW
  118074.     91587.    209661.   398.43   332.58   731.01    22.004   19.155
41.158      21.413       0.440        39.515        10.777
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: AZNM     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
```

(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Scrubbed Coal 2
38509. 30585. 69094. 393.98 312.91 706.89 88.795 70.523 1
59.318 85.093 1.083 66.866 18.236
Total Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal 4
1726. 1371. 3098. 17.84 14.17 32.00 3.766 2.991
6.757 12.432 0.033 2.980 0.813
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
16759. 13773. 30532. 176.42 144.93 321.35 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
3484. 3538. 7022. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
40368. 29761. 70129. 306.68 224.95 531.63 4.429 2.925
7.354 0.000 0.000 28.214 7.695
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
0. 301. 301. 0.00 3.31 3.31 0.000 0.136
0.136 0.000 0.000 0.176 0.048
Total Biomass 12
273. 201. 475. 2.23 1.64 3.87 0.022 0.016
0.039 0.155 0.001 0.000 0.000
Total Geothermal 13
1368. 996. 2363. 44.29 32.24 76.53 0.000 0.000
0.000 0.000 0.141 0.000 0.000
Total Landfill Gas 14
74. 56. 130. 0.92 0.69 1.62 0.113 0.085
0.199 0.000 0.000 0.000 0.000
Total Wind 15
603. 314. 917. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
21. 15. 36. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
64. 46. 110. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
Total Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                         23
    4981.      3618.      8600.    39.34    28.28    67.62     1.222    0.794
 2.015       0.000       0.000         3.589         0.979
Total Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                   27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                 28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                         30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                         31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                       32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                 33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                     34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                      35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                   36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                    37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub            38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub           39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                         40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR            41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                        42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total AZNM
  108230.     84575.    192805.   981.70   763.13  1744.83    98.347   77.469  1
75.817      97.680       1.258       101.825        27.770
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Region: RMPA     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
     332.       264.       596.     2.99     2.37     5.36     0.164    0.131
 0.295       0.201       0.001         0.499         0.136
Total Scrubbed Coal                 2
   17256.     13705.     30962.   180.44   143.31   323.75    33.663   26.736
60.398      25.494       0.342        30.503         8.319
```

```
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
    8167.      6487.     14654.    85.70    68.07   153.77    21.904   17.397
39.301      52.468       0.113        14.642         3.993
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    3767.      3826.      7592.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    4783.      2344.      7126.    36.32    17.80    54.12     0.563    0.276
 0.839       0.000       0.000         2.872         0.783
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
     129.         0.       129.     1.41     0.00     1.41     0.058    0.000
 0.058       0.000       0.000         0.075         0.020
Total Biomass                       12
       4.         3.         8.     0.03     0.03     0.06     0.000    0.000
 0.001       0.002       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       4.         3.         8.     0.06     0.05     0.11     0.008    0.006
 0.013       0.000       0.000         0.000         0.000
Total Wind                          15
     648.       363.      1011.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       5.         3.         7.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
     811.        42.       853.     7.00     0.36     7.36     0.400    0.021
 0.421       0.000       0.000         0.390         0.106
Total Cgn_Oil                       24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
      30.        23.        54.     0.24     0.19     0.43     0.002    0.002
 0.004       0.017       0.000         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                        49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI               51
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuke Early Retirement 74
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total RMPA
35937. 27063. 63000. 314.21 232.17 546.38 56.763 44.567 1
01.330 78.183 0.457 48.982 13.359

(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2015, Region: NWPE (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Scrubbed Coal 2
43487. 34160. 77647. 444.94 349.47 794.41 93.567 73.529 1
67.096 46.908 0.775 74.719 20.378
Total Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal 4
7819. 6210. 14029. 80.57 63.99 144.57 17.408 13.826
31.234 57.684 0.214 13.624 3.716
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
2460. 2498. 4958. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
807. 271. 1077. 6.05 2.03 8.08 0.061 0.020
0.081 0.000 0.000 0.429 0.117
Total IGCC 10
433. 335. 768. 3.15 2.44 5.59 0.095 0.073
0.168 0.000 0.001 0.520 0.142
Total Turbine 11
49. 26. 75. 0.44 0.28 0.72 0.028 0.012
0.040 0.000 0.000 0.038 0.010
Total Biomass 12
22. 17. 38. 0.17 0.13 0.31 0.002 0.001
0.003 0.012 0.000 0.000 0.000
Total Geothermal 13
1026. 811. 1837. 32.60 25.77 58.37 0.000 0.000
0.000 0.000 0.106 0.000 0.000
Total Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Wind 15
62. 35. 97. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
38. 20. 59. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
183. 140. 323. 2.02 1.54 3.56 0.706 0.538
1.244 0.012 0.018 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
223. 180. 402. 1.81 1.46 3.28 0.325 0.263
0.588 1.638 0.007 0.316 0.086
Total Cgn_Gas 23
45. 34. 79. 0.29 0.22 0.51 0.021 0.016
0.037 0.000 0.000 0.027 0.007
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
43. 33. 77. 0.18 0.14 0.32 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Coal                        29
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Gas                         30
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Oil                         31
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Other                       32
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total SteamOnly Cogen                 33
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-CC                     34
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.O/G-CC                      35
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-IGCC                   36
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Scrubber                    37
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR & Scrub            38
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR & Scrub           39
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR                         40
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SCR            41
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR                        42
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SNCR           43
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR+Scrb                    44
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR+Scrub                  45
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Gas Reburn                  46
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR             47
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub             48
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                         49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NWPE
   56697.     44769.    101466.   572.24   447.47  1019.70   112.212   88.279  2
00.492     106.254       1.122        89.673        24.456
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration




--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Scrubbed Coal_NOx              1         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Scrubbed Coal_NOx              1
      83.        66.       149.     0.86     0.69     1.55     0.168    0.134
 0.302       0.258       0.000         0.144         0.039
ECAO    Scrubbed Coal_NOx              1
   40273.     31824.     72097.   396.73   313.19   709.92    13.488   10.342
23.830      91.528       0.434        66.110        18.030
ERCT    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Scrubbed Coal_NOx              1
    1241.       826.      2066.    12.55     8.35    20.91     2.052    1.365
 3.417       2.441       0.044         1.947         0.531
MACW    Scrubbed Coal_NOx              1
    4856.      3856.      8712.    45.81    36.39    82.20     0.701    0.556
 1.257       6.960       0.058         7.655         2.088
MACS    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Scrubbed Coal_NOx              1
     249.       198.       447.     2.49     1.97     4.46     0.257    0.204
 0.460       0.557       0.001         0.415         0.113
MAPP    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
UPNY    Scrubbed Coal_NOx             1
    3453.      2742.      6195.    31.97    25.39    57.35     0.671    0.533
 1.204       6.333       0.053         5.341         1.457
DSNY    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Scrubbed Coal_NOx             1
     324.       257.       581.     3.37     2.68     6.04     0.339    0.269
 0.607       0.332       0.019         0.563         0.153
FRCC    Scrubbed Coal_NOx             1
    8931.      7093.     16024.    86.61    68.78   155.39     4.806    3.817
 8.623      14.398       0.057        14.470         3.946
VACA    Scrubbed Coal_NOx             1
   18838.     14961.     33799.   183.88   146.04   329.91     5.856    4.651
10.507      21.200       0.119        30.722         8.379
TVA     Scrubbed Coal_NOx             1
   24905.     19780.     44685.   243.93   193.74   437.67     8.535    6.779
15.314      54.709       0.176        40.757        11.116
SOU     Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Scrubbed Coal_NOx             1
    4524.      3593.      8116.    43.72    34.72    78.45     0.464    0.369
 0.833       6.636       0.117         7.447         2.031
SPPS    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Scrubbed Coal_NOx             1
     332.       264.       596.     2.99     2.37     5.36     0.164    0.131
 0.295       0.201       0.001         0.499         0.136
NWPE    Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Scrubbed Coal_NOx             1
  108008.     85460.    193467.  1054.90   834.31  1889.21    37.501   29.149
66.650     205.554       1.078       176.070        48.019
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

NOx

```
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Scrubbed Coal                  2         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Scrubbed Coal                  2
     477.       379.       856.     5.40     4.29     9.69     0.846    0.672
 1.518       0.457       0.011         0.902         0.246
ECAO    Scrubbed Coal                  2
    1903.      1409.      3312.    19.80    14.58    34.39     5.018    3.761
 8.779       8.161       0.082         3.202         0.873
ERCT    Scrubbed Coal                  2
   17327.     16428.     33755.   184.92   176.54   361.46    29.105   27.626
56.731     109.463       0.910        35.210         9.603
MACE    Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Scrubbed Coal                  2
     133.        88.       221.     1.38     0.92     2.30     0.277    0.184
 0.461       0.414       0.006         0.214         0.058
MACS    Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Scrubbed Coal                  2
     552.       415.       967.     6.07     4.54    10.61     0.940    0.703
 1.643       4.275       0.008         0.988         0.269
MANO    Scrubbed Coal                  2
     813.       646.      1459.     9.14     7.26    16.41     2.491    1.978
 4.470       6.680       0.035         1.528         0.417
MAPP    Scrubbed Coal                  2
   24068.     18592.     42661.   260.88   201.49   462.37    51.370   39.170
90.539      85.350       1.230        44.742        12.202
UPNY    Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Scrubbed Coal                  2
     726.       577.      1303.     7.63     6.06    13.68     1.252    0.994
 2.246       3.585       0.012         1.274         0.347
VACA    Scrubbed Coal                  2
    2743.      2179.      4922.    28.53    22.66    51.19     3.361    2.669
 6.030       4.389       0.034         4.767         1.300
TVA     Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Scrubbed Coal                  2
     423.       336.       760.     4.90     3.90     8.80     0.839    0.666
 1.505       0.271       0.008         0.820         0.224
```

```
ENTG    Scrubbed Coal                   2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Scrubbed Coal                   2
   18584.     14665.     33249.   199.02   157.08   356.10    46.918   37.115
84.033      28.113       0.808        34.007         9.275
SPPS    Scrubbed Coal                   2
    2158.      1714.      3872.    23.20    18.43    41.63     3.608    2.865
 6.473       2.768       0.088         4.016         1.095
CALI    Scrubbed Coal                   2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Scrubbed Coal                   2
    5561.      4417.      9978.    56.95    45.23   102.17    11.389    9.046
20.435       5.364       0.237         9.858         2.688
AZNM    Scrubbed Coal                   2
   38509.     30585.     69094.   393.98   312.91   706.89    88.795   70.523  1
59.318      85.093       1.083        66.866        18.236
RMPA    Scrubbed Coal                   2
   17256.     13705.     30962.   180.44   143.31   323.75    33.663   26.736
60.398      25.494       0.342        30.503         8.319
NWPE    Scrubbed Coal                   2
   43487.     34160.     77647.   444.94   349.47   794.41    93.567   73.529  1
67.096      46.908       0.775        74.719        20.378

Total Scrubbed Coal                 2
  174722.    140295.    315018.  1827.20  1468.65  3295.85   373.438  298.238  6
71.676     416.783       5.667       313.616        85.532
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Unscrubbed Coal_NOx            3         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Unscrubbed Coal_NOx             3
   12533.      9954.     22488.   115.39    91.65   207.04     2.171    1.725
 3.896     103.521       0.456        19.970         5.446
ECAO    Unscrubbed Coal_NOx             3
    6997.      4630.     11628.    67.02    44.35   111.37     7.055    4.665
11.719      61.537       0.171        10.371         2.828
ERCT    Unscrubbed Coal_NOx             3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Unscrubbed Coal_NOx             3
    4828.      3358.      8185.    48.84    33.72    82.56     5.482    3.788
 9.271      45.406       0.157         7.688         2.097
MACW    Unscrubbed Coal_NOx             3
     473.       201.       674.     4.71     2.00     6.71     0.881    0.374
 1.255       3.692       0.011         0.625         0.170
MACS    Unscrubbed Coal_NOx             3
    1321.       805.      2126.    13.48     8.22    21.70     3.411    2.079
```

```
 5.490      16.275       0.015         2.021         0.551
WUMS    Unscrubbed Coal_NOx            3
     285.       226.       511.     3.06     2.43     5.49     0.685    0.544
 1.230       1.878       0.012         0.530         0.144
MANO    Unscrubbed Coal_NOx            3
    1212.       806.      2018.    11.83     7.87    19.71     1.745    1.161
 2.907       6.700       0.062         1.901         0.519
MAPP    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Unscrubbed Coal_NOx            3
    1502.      1193.      2696.    14.92    11.85    26.77     1.768    1.404
 3.171      14.721       0.044         2.492         0.680
DSNY    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Unscrubbed Coal_NOx            3
     716.       415.      1131.     7.41     4.30    11.71     0.903    0.529
 1.432       6.442       0.019         1.091         0.297
FRCC    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Unscrubbed Coal_NOx            3
    9991.      7418.     17409.    99.07    73.44   172.51     8.709    6.271
14.980      94.882       0.274        16.065         4.381
TVA     Unscrubbed Coal_NOx            3
    9039.      7179.     16218.    88.00    69.89   157.88     2.360    1.874
 4.234      84.159       0.313        14.703         4.010
SOU     Unscrubbed Coal_NOx            3
    5565.      4420.      9985.    52.53    41.72    94.24     0.867    0.688
 1.555      47.121       0.124         8.776         2.393
ENTG    Unscrubbed Coal_NOx            3
    4814.      3824.      8638.    48.38    38.43    86.81     1.766    1.403
 3.169      20.400       0.114         8.084         2.205
SPPN    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Unscrubbed Coal_NOx            3
    2034.      1615.      3649.    21.76    17.28    39.03     4.938    3.922
 8.861      14.247       0.123         3.766         1.027
CALI    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Unscrubbed Coal_NOx            3
   61311.     46045.    107356.   596.40   447.14  1043.54    42.742   30.428
73.169     520.981       1.896        98.082        26.750
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Unscrubbed Coal                4         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Unscrubbed Coal                4
   26102.     19263.     45365.   257.64   189.94   447.58    42.943   31.632
74.575     208.413       0.788        42.417        11.568
ECAO    Unscrubbed Coal                4
   27138.     18478.     45616.   277.01   188.51   465.52    54.431   36.834
91.265     259.481       0.902        43.589        11.888
ERCT    Unscrubbed Coal                4
    7437.      5907.     13344.    71.94    57.14   129.08    11.191    8.888
20.079      45.628       0.334        12.303         3.355
MACE    Unscrubbed Coal                4
     992.       788.      1781.    10.13     8.05    18.18     1.959    1.556
 3.514      10.001       0.025         1.693         0.462
MACW    Unscrubbed Coal                4
    3724.      2328.      6052.    37.12    23.17    60.29     7.632    4.758
12.390      37.721       0.118         5.614         1.531
MACS    Unscrubbed Coal                4
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Unscrubbed Coal                4
   16531.     12695.     29226.   171.52   131.54   303.05    28.455   21.781
50.235     125.049       0.667        28.931         7.890
MANO    Unscrubbed Coal                4
   35811.     23553.     59364.   359.87   236.55   596.43    49.069   32.322
81.391     257.626       1.238        56.758        15.479
MAPP    Unscrubbed Coal                4
   31911.     23200.     55111.   338.39   245.66   584.05    69.560   51.093  1
20.653     256.249       1.304        55.762        15.208
UPNY    Unscrubbed Coal                4
    3843.      3052.      6895.    39.73    31.55    71.28     8.023    6.372
14.395      44.163       0.205         6.638         1.810
DSNY    Unscrubbed Coal                4
    3063.      2327.      5390.    31.73    24.06    55.79     5.923    4.493
10.417      28.477       0.092         5.196         1.417
NYC     Unscrubbed Coal                4
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Unscrubbed Coal                4
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Unscrubbed Coal                4
     491.       390.       880.     4.77     3.79     8.57     0.622    0.494
 1.116       4.712       0.015         0.798         0.218
FRCC    Unscrubbed Coal                4
    1287.      1022.      2308.    13.20    10.48    23.68     2.348    1.865
 4.213      11.841       0.035         2.205         0.601
```

VACA Unscrubbed Coal 4
12900. 9555. 22455. 132.31 98.03 230.34 24.904 18.730
43.635 124.883 0.417 21.450 5.850
TVA Unscrubbed Coal 4
12923. 10263. 23186. 133.54 106.06 239.60 24.822 19.714
44.535 122.291 0.277 22.312 6.085
SOU Unscrubbed Coal 4
19243. 16030. 35274. 191.62 160.62 352.24 33.796 28.405
62.201 187.942 0.549 32.801 8.946
ENTG Unscrubbed Coal 4
14454. 11480. 25933. 147.93 117.49 265.43 22.748 18.067
40.815 103.076 0.773 25.465 6.945
SPPN Unscrubbed Coal 4
6942. 5312. 12254. 74.58 56.95 131.53 18.022 13.915
31.936 54.034 0.237 12.371 3.374
SPPS Unscrubbed Coal 4
24942. 19810. 44752. 249.98 198.54 448.51 45.902 36.457
82.359 155.328 1.109 43.265 11.800
CALI Unscrubbed Coal 4
710. 564. 1273. 7.79 6.19 13.97 0.802 0.637
1.438 6.987 0.029 1.301 0.355
PNW Unscrubbed Coal 4
2212. 1757. 3969. 23.92 19.00 42.93 5.280 4.194
9.474 15.782 0.095 4.135 1.128
AZNM Unscrubbed Coal 4
1726. 1371. 3098. 17.84 14.17 32.00 3.766 2.991
6.757 12.432 0.033 2.980 0.813
RMPA Unscrubbed Coal 4
8167. 6487. 14654. 85.70 68.07 153.77 21.904 17.397
39.301 52.468 0.113 14.642 3.993
NWPE Unscrubbed Coal 4
7819. 6210. 14029. 80.57 63.99 144.57 17.408 13.826
31.234 57.684 0.214 13.624 3.716

Total Unscrubbed Coal 4
270368. 201842. 472210. 2758.84 2059.56 4818.40 501.510 376.419 8
77.928 2182.267 9.569 456.252 124.432

NOx
SO2 MER CO2 Carbon
Year: 2015, Plant Type: Oil/Gas Steam 5 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Oil/Gas Steam 5
1053. 570. 1623. 10.10 5.46 15.56 1.005 0.544
1.548 0.000 0.000 0.826 0.225
ECAO Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Oil/Gas Steam 5
1905. 18939. 20843. 18.67 190.55 209.23 4.500 27.283

31.783 0.000 0.000 11.104 3.028
MACE Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Oil/Gas Steam 5
0. 3697. 3697. 0.00 35.27 35.27 0.000 2.416
2.416 0.000 0.000 1.872 0.510
LILC Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Oil/Gas Steam 5
0. 1756. 1756. 0.00 17.44 17.44 0.000 2.128
2.128 0.000 0.000 0.926 0.252
VACA Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Oil/Gas Steam 5
0. 5723. 5723. 0.00 57.09 57.09 0.000 7.828
7.828 0.000 0.000 3.030 0.826
CALI Oil/Gas Steam 5
2503. 1950. 4453. 23.87 18.60 42.46 0.239 0.186
0.425 0.000 0.000 2.254 0.615
PNW Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Oil/Gas Steam 5

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Oil/Gas Steam                  5
    5461.     32634.     38095.    52.64   324.41   377.04     5.743   40.384
46.128       0.000       0.000        20.010         5.457
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Oil/Gas Steam_Nox              6         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Oil/Gas Steam_Nox              6
       0.      3030.      3030.     0.00    30.13    30.13     0.000    1.322
 1.322       0.000       0.000         1.599         0.436
MACE    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
LILC    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Oil/Gas Steam_Nox              6
       0.      3030.      3030.     0.00    30.13    30.13     0.000    1.322
 1.322       0.000       0.000         1.599         0.436
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Nuclear                        7         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
               (GWh)                            (Btu)                  (1000 Tons)
          (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

```
MECS    Nuclear                         7
    4676.      4072.      8748.    60.17    52.40   112.57     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Nuclear                         7
   22460.     14798.     37257.   235.58   155.01   390.59     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Nuclear                         7
   22733.     17771.     40504.   237.70   185.63   423.33     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Nuclear                         7
   39871.     29287.     69158.   423.82   311.50   735.32     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Nuclear                         7
   14933.      9678.     24611.   158.92   103.19   262.11     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Nuclear                         7
    8494.      5572.     14066.    92.30    60.55   152.85     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Nuclear                         7
    6473.      4940.     11413.    68.66    52.63   121.29     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Nuclear                         7
   59882.     44708.    104589.   631.89   471.36  1103.25     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Nuclear                         7
   15199.     11979.     27178.   162.83   128.08   290.91     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Nuclear                         7
   12775.     11229.     24005.   133.92   117.80   251.72     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Nuclear                         7
    2820.      3469.      6289.    28.53    35.10    63.63     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Nuclear                         7
   20418.     14268.     34685.   206.28   144.13   350.41     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Nuclear                         7
   17962.     13864.     31827.   196.49   151.76   348.26     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Nuclear                         7
   69531.     54252.    123783.   711.26   555.45  1266.71     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Nuclear                         7
   32851.     25702.     58553.   341.49   266.95   608.44     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Nuclear                         7
   27106.     20888.     47993.   296.09   228.26   524.35     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Nuclear                         7
   24520.     18179.     42699.   272.03   201.81   473.83     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Nuclear                         7
    5668.      4084.      9752.    55.33    39.87    95.20     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Nuclear                         7
```

```
   20241.     15089.     35329.   206.46   153.43   359.88     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Nuclear                        7
    5713.      3138.      8851.    57.49    31.58    89.07     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Nuclear                        7
   16759.     13773.     30532.   176.42   144.93   321.35     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Nuclear                        7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Nuclear                        7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Nuclear                        7
  451086.    340738.    791824.  4753.68  3591.41  8345.09     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
```

```
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Hydro                          8         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Hydro                          8
     618.       395.      1013.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Hydro                          8
    1806.      1169.      2974.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Hydro                          8
     431.       365.       796.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Hydro                          8
    2346.      1770.      4115.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Hydro                          8
    1512.       632.      2144.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Hydro                          8
      43.        16.        59.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Hydro                          8
    1007.       676.      1683.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Hydro                          8
    1079.       747.      1826.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Hydro                          8
    5412.      4577.      9989.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
UPNY    Hydro                           8
   15534.     10355.     25889.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Hydro                           8
    1237.       824.      2061.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Hydro                           8
       0.          0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Hydro                           8
       0.          0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Hydro                           8
    3489.      1724.      5212.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Hydro                           8
      83.        38.       121.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Hydro                           8
    6437.      3139.      9575.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Hydro                           8
   11469.      6255.     17724.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Hydro                           8
    6138.      2706.      8844.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Hydro                           8
     646.       474.      1120.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Hydro                           8
     601.       418.      1020.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Hydro                           8
    4702.      3448.      8150.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Hydro                           8
   16750.     17655.     34405.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Hydro                           8
   63340.     47747.    111087.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Hydro                           8
    3484.      3538.      7022.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Hydro                           8
    3767.      3826.      7592.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Hydro                           8
    2460.      2498.      4958.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Hydro                         8
  154390.    114990.    269380.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
```

Year: 2015, Plant Type: Comb.Cycle Gas 9 (Emissions By Region)

		Generation			Trillion			Emission			Emission			Emission			Emission		
		(GWh)			(Btu)			(1000 Tons)			(1000 Tons)			(Tons)			(Mil Tonnes)		
		WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER	Total
MECS	Comb.Cycle Gas	9																	
		3798.	2274.	6071.	28.51	17.11	45.62	0.292	0.188	0.480	0.000	0.000	0.000	2.421	0.660				
ECAO	Comb.Cycle Gas	9																	
		12910.	9872.	22782.	97.11	74.25	171.36	1.119	0.855	1.974	0.000	0.000	0.000	9.094	2.480				
ERCT	Comb.Cycle Gas	9																	
		76323.	64278.	140602.	565.69	478.15	1043.84	5.782	5.069	10.851	0.000	0.000	0.000	55.397	15.108				
MACE	Comb.Cycle Gas	9																	
		11369.	8611.	19979.	88.24	67.65	155.89	1.728	1.418	3.146	0.000	0.000	0.000	8.273	2.256				
MACW	Comb.Cycle Gas	9																	
		5422.	4159.	9581.	40.66	31.19	71.86	0.407	0.312	0.719	0.000	0.000	0.000	3.813	1.040				
MACS	Comb.Cycle Gas	9																	
		1588.	866.	2454.	11.35	6.43	17.77	0.138	0.120	0.258	0.000	0.000	0.000	0.943	0.257				
WUMS	Comb.Cycle Gas	9																	
		2290.	1323.	3613.	17.05	10.02	27.07	0.434	0.302	0.736	0.000	0.000	0.000	1.437	0.392				
MANO	Comb.Cycle Gas	9																	
		3241.	1729.	4970.	24.33	13.01	37.33	0.245	0.135	0.380	0.000	0.000	0.000	1.981	0.540				
MAPP	Comb.Cycle Gas	9																	
		1704.	1283.	2987.	12.92	9.84	22.76	0.174	0.151	0.324	0.000	0.000	0.000	1.208	0.329				
UPNY	Comb.Cycle Gas	9																	
		16.	5.	22.	0.18	0.06	0.24	0.017	0.005	0.022	0.000	0.000	0.000	0.013	0.003				
DSNY	Comb.Cycle Gas	9																	
		8224.	6343.	14567.	61.76	47.76	109.52	0.639	0.526	1.164	0.000	0.000	0.000	5.813	1.585				
NYC	Comb.Cycle Gas	9																	
		6094.	3594.	9688.	44.01	26.13	70.14	0.788	0.529	1.317	0.000	0.000	0.000	3.722	1.015				
LILC	Comb.Cycle Gas	9																	
		9661.	6994.	16655.	68.60	49.68	118.28	0.770	0.561	1.331	0.000	0.000	0.000	6.277	1.712				
NENG	Comb.Cycle Gas	9																	
		41084.	29049.	70133.	311.42	220.71	532.14	4.717	3.404	8.121	0.000	0.000	0.000	28.241	7.702				
FRCC	Comb.Cycle Gas	9																	
		38779.	38236.	77015.	301.00	297.99	598.99	7.751	7.858	15.609	0.000	0.000	0.000	31.789	8.670				
VACA	Comb.Cycle Gas	9																	
		10681.	8546.	19227.	78.40	65.65	144.05	1.154	1.576	2.730	0.000	0.000	0.000	7.645	2.085				
TVA	Comb.Cycle Gas	9																	
		6771.	5677.	12448.	50.78	42.58	93.36	0.508	0.426	0.934	0.000	0.000	0.000	4.955	1.351				
SOU	Comb.Cycle Gas	9																	
		52971.	37058.	90029.	397.42	278.08	675.51	4.149	2.908	7.057	0.000	0.000	0.000	35.849	9.777				
ENTG	Comb.Cycle Gas	9																	

```
   28877.     24389.     53267.   216.58   182.97   399.55     2.166    1.839
 4.005       0.000       0.000        21.204         5.783
SPPN    Comb.Cycle Gas                  9
    2897.      2223.      5120.    21.73    16.67    38.40     0.217    0.167
 0.384       0.000       0.000         2.038         0.556
SPPS    Comb.Cycle Gas                  9
   27209.     26927.     54136.   205.46   204.57   410.03     2.745    3.119
 5.864       0.000       0.000        21.760         5.935
CALI    Comb.Cycle Gas                  9
   61906.     46098.    108004.   449.88   336.08   785.96     4.545    3.393
 7.938       0.000       0.000        41.711        11.376
PNW     Comb.Cycle Gas                  9
   25259.     18849.     44108.   188.14   140.60   328.74     3.066    2.315
 5.381       0.000       0.000        17.446         4.758
AZNM    Comb.Cycle Gas                  9
   40368.     29761.     70129.   306.68   224.95   531.63     4.429    2.925
 7.354       0.000       0.000        28.214         7.695
RMPA    Comb.Cycle Gas                  9
    4783.      2344.      7126.    36.32    17.80    54.12     0.563    0.276
 0.839       0.000       0.000         2.872         0.783
NWPE    Comb.Cycle Gas                  9
     807.       271.      1077.     6.05     2.03     8.08     0.061    0.020
 0.081       0.000       0.000         0.429         0.117

Total Comb.Cycle Gas                 9
  485033.    380756.    865789.  3630.28  2861.95  6492.23    48.602   40.396
88.998       0.000       0.000       344.545        93.967
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: IGCC                          10         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    IGCC                            10
    1135.       877.      2013.     8.26     6.38    14.64     0.413    0.319
 0.732       0.000       0.006         1.364         0.372
ERCT    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
WUMS    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    IGCC                            10
    1083.       837.      1921.     7.88     6.09    13.97     0.394    0.305
 0.699       0.000       0.003         1.301         0.355
VACA    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    IGCC                            10
     433.       335.       768.     3.15     2.44     5.59     0.095    0.073
 0.168       0.000       0.001         0.520         0.142

Total IGCC                          10
    2652.      2050.      4702.    19.30    14.91    34.21     0.902    0.697
 1.598       0.000       0.010         3.185         0.869
-------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER          CO2          Carbon
Year: 2015, Plant Type: Turbine                      11         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Turbine                        11
      41.       390.       432.     0.43     4.25     4.68     0.021    0.173
 0.194       0.000       0.000         0.248         0.068
ECAO    Turbine                        11
    3781.      2003.      5784.    41.35    21.91    63.26     1.689    0.895
 2.583       0.000       0.000         3.357         0.916
ERCT    Turbine                        11
    2903.      6148.      9051.    27.21    56.21    83.43     1.326    2.767
 4.093       0.000       0.000         4.427         1.207
MACE    Turbine                        11
     222.       544.       766.     2.44     6.00     8.44     0.104    0.273
 0.377       0.000       0.000         0.448         0.122
MACW    Turbine                        11
      25.       116.       140.     0.27     1.26     1.53     0.011    0.051
 0.061       0.000       0.000         0.081         0.022
MACS    Turbine                        11
     777.      1305.      2082.     7.11    14.18    21.29     0.360    0.760
 1.120       0.000       0.000         1.130         0.308
WUMS    Turbine                        11
    1696.      1007.      2703.    15.07     9.54    24.61     0.727    0.440
 1.167       0.000       0.000         1.306         0.356
MANO    Turbine                        11
     285.      2270.      2555.     3.10    24.75    27.85     0.131    1.023
 1.154       0.000       0.000         1.478         0.403
MAPP    Turbine                        11
     273.      1092.      1366.     2.90    12.33    15.23     0.130    0.566
 0.697       0.000       0.000         0.808         0.220
UPNY    Turbine                        11
      12.         9.        21.     0.13     0.10     0.22     0.005    0.004
 0.009       0.000       0.000         0.012         0.003
DSNY    Turbine                        11
       0.         1.         1.     0.00     0.01     0.01     0.000    0.001
 0.001       0.000       0.000         0.001         0.000
NYC     Turbine                        11
     457.       139.       597.     5.43     1.71     7.13     0.263    0.088
 0.351       0.000       0.000         0.379         0.103
LILC    Turbine                        11
     288.       472.       760.     3.15     5.80     8.95     0.127    0.302
 0.428       0.000       0.000         0.475         0.129
NENG    Turbine                        11
     107.       199.       306.     1.13     2.16     3.29     0.050    0.091
 0.141       0.000       0.000         0.175         0.048
FRCC    Turbine                        11
    1323.      5462.      6786.    14.51    60.79    75.30     0.597    2.605
 3.202       0.000       0.000         3.996         1.090
VACA    Turbine                        11
```

```
    1465.      3817.      5282.    13.26    36.80    50.06     0.630    1.670
 2.299       0.000       0.000         2.656         0.724
TVA     Turbine                        11
       0.      1096.      1096.     0.00    12.00    12.00     0.000    0.485
 0.485       0.000       0.000         0.637         0.174
SOU     Turbine                        11
     375.      5673.      6047.     3.46    57.91    61.37     0.161    2.461
 2.623       0.000       0.000         3.257         0.888
ENTG    Turbine                        11
       0.       117.       117.     0.00     1.28     1.28     0.000    0.051
 0.051       0.000       0.000         0.068         0.019
SPPN    Turbine                        11
      21.      1636.      1658.     0.21    19.20    19.41     0.011    0.962
 0.974       0.000       0.000         1.030         0.281
SPPS    Turbine                        11
     164.       384.       548.     1.79     4.75     6.54     0.073    0.223
 0.296       0.000       0.000         0.347         0.095
CALI    Turbine                        11
     167.       600.       767.     1.53     6.87     8.41     0.078    0.275
 0.354       0.000       0.000         0.446         0.122
PNW     Turbine                        11
    1931.      5271.      7201.    20.69    56.77    77.46     0.916    2.564
 3.481       0.000       0.000         4.111         1.121
AZNM    Turbine                        11
       0.       301.       301.     0.00     3.31     3.31     0.000    0.136
 0.136       0.000       0.000         0.176         0.048
RMPA    Turbine                        11
     129.         0.       129.     1.41     0.00     1.41     0.058    0.000
 0.058       0.000       0.000         0.075         0.020
NWPE    Turbine                        11
      49.        26.        75.     0.44     0.28     0.72     0.028    0.012
 0.040       0.000       0.000         0.038         0.010

Total Turbine                          11
   16493.     40079.     56572.   167.03   420.16   587.19     7.497   18.879
26.376       0.000       0.000        31.162         8.499
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Biomass                       12         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Biomass                        12
     698.       539.      1237.     6.44     4.97    11.41     0.064    0.050
 0.114       0.456       0.003         0.000         0.000
ECAO    Biomass                        12
     364.       281.       645.     3.36     2.59     5.95     0.034    0.026
 0.060       0.238       0.002         0.000         0.000
ERCT    Biomass                        12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MACE    Biomass                         12
     266.       194.       459.     2.18     1.59     3.76     0.022    0.016
 0.038       0.150       0.001        0.000         0.000
MACW    Biomass                         12
      74.        57.       131.     0.68     0.53     1.20     0.007    0.005
 0.012       0.048       0.000        0.000         0.000
MACS    Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
WUMS    Biomass                         12
      52.        40.        92.     0.42     0.32     0.74     0.004    0.003
 0.007       0.030       0.000        0.000         0.000
MANO    Biomass                         12
       4.         3.         8.     0.03     0.03     0.06     0.000    0.000
 0.001       0.002       0.000        0.000         0.000
MAPP    Biomass                         12
     706.       546.      1252.     5.72     4.42    10.14     0.057    0.044
 0.101       0.405       0.003        0.000         0.000
UPNY    Biomass                         12
      78.        60.       138.     0.72     0.56     1.28     0.007    0.006
 0.013       0.051       0.000        0.000         0.000
DSNY    Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
NYC     Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
LILC    Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
NENG    Biomass                         12
     734.       530.      1264.     6.61     4.76    11.37     0.066    0.048
 0.114       0.455       0.003        0.000         0.000
FRCC    Biomass                         12
     234.       181.       415.     2.16     1.67     3.83     0.022    0.017
 0.038       0.153       0.001        0.000         0.000
VACA    Biomass                         12
     204.       157.       361.     1.88     1.45     3.33     0.019    0.015
 0.033       0.133       0.001        0.000         0.000
TVA     Biomass                         12
       4.         3.         8.     0.04     0.03     0.07     0.000    0.000
 0.001       0.003       0.000        0.000         0.000
SOU     Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
ENTG    Biomass                         12
      43.        33.        77.     0.40     0.31     0.71     0.004    0.003
 0.007       0.028       0.000        0.000         0.000
SPPN    Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
SPPS    Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
CALI    Biomass                         12
    1872.      1447.      3319.    17.09    13.21    30.30     0.171    0.132
 0.303       1.212       0.009        0.000         0.000
PNW     Biomass                         12
      26.        20.        46.     0.21     0.16     0.37     0.002    0.002
 0.004       0.015       0.000        0.000         0.000
AZNM    Biomass                         12
     273.       201.       475.     2.23     1.64     3.87     0.022    0.016
 0.039       0.155       0.001        0.000         0.000
RMPA    Biomass                         12
       4.         3.         8.     0.03     0.03     0.06     0.000    0.000
```

```
 0.001       0.002       0.000         0.000         0.000
NWPE    Biomass                        12
      22.        17.        38.     0.17     0.13     0.31     0.002    0.001
 0.003       0.012       0.000         0.000         0.000

Total Biomass                         12
    5659.      4314.      9973.    50.36    38.40    88.76     0.504    0.384
 0.888       3.551       0.025         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Geothermal                    13         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
--------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Geothermal                     13
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Geothermal                    13
   11344.      8966.     20310.   291.69   230.53   522.21     0.000    0.000
 0.000       0.000       0.775         0.000         0.000
PNW     Geothermal                    13
      34.        27.        61.     1.10     0.87     1.97     0.000    0.000
 0.000       0.000       0.004         0.000         0.000
AZNM    Geothermal                    13
    1368.       996.      2363.    44.29    32.24    76.53     0.000    0.000
 0.000       0.000       0.141         0.000         0.000
RMPA    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Geothermal                    13
    1026.       811.      1837.    32.60    25.77    58.37     0.000    0.000
 0.000       0.000       0.106         0.000         0.000

Total Geothermal                    13
   13772.     10799.     24571.   369.68   289.40   659.08     0.000    0.000
 0.000       0.000       1.027         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Landfill Gas                 14         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
               (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

MECS Landfill Gas 14
22. 17. 39. 0.31 0.23 0.54 0.038 0.029
0.066 0.000 0.000 0.000 0.000
ECAO Landfill Gas 14
54. 41. 95. 0.73 0.56 1.29 0.090 0.069
0.159 0.000 0.000 0.000 0.000
ERCT Landfill Gas 14
564. 419. 983. 6.73 5.02 11.75 0.828 0.618
1.446 0.000 0.000 0.000 0.000
MACE Landfill Gas 14
601. 438. 1038. 6.28 4.59 10.87 0.772 0.564
1.337 0.000 0.000 0.000 0.000
MACW Landfill Gas 14
4. 3. 8. 0.06 0.05 0.11 0.008 0.006
0.013 0.000 0.000 0.000 0.000
MACS Landfill Gas 14
18. 14. 32. 0.24 0.19 0.43 0.030 0.023
0.053 0.000 0.000 0.000 0.000
WUMS Landfill Gas 14
194. 143. 337. 2.17 1.60 3.77 0.267 0.197
0.464 0.000 0.000 0.000 0.000
MANO Landfill Gas 14
170. 130. 300. 2.32 1.77 4.09 0.285 0.218
0.503 0.000 0.000 0.000 0.000
MAPP Landfill Gas 14
49. 38. 87. 0.67 0.51 1.18 0.083 0.063
0.146 0.000 0.000 0.000 0.000
UPNY Landfill Gas 14
27. 20. 47. 0.37 0.28 0.65 0.045 0.034
0.079 0.000 0.000 0.000 0.000
DSNY Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Landfill Gas 14
707. 513. 1220. 7.36 5.36 12.72 0.905 0.659
1.564 0.000 0.000 0.000 0.000
FRCC Landfill Gas 14
9. 7. 16. 0.12 0.09 0.22 0.015 0.011
0.026 0.000 0.000 0.000 0.000
VACA Landfill Gas 14
112. 85. 197. 1.53 1.16 2.69 0.188 0.143
0.331 0.000 0.000 0.000 0.000
TVA Landfill Gas 14
9. 7. 16. 0.12 0.09 0.22 0.015 0.011
0.026 0.000 0.000 0.000 0.000
SOU Landfill Gas 14
40. 31. 71. 0.55 0.42 0.97 0.068 0.052
0.119 0.000 0.000 0.000 0.000
ENTG Landfill Gas 14
27. 20. 47. 0.37 0.28 0.65 0.045 0.034
0.079 0.000 0.000 0.000 0.000
SPPN Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Landfill Gas 14
40. 31. 71. 0.55 0.42 0.97 0.068 0.052
0.119 0.000 0.000 0.000 0.000
CALI Landfill Gas 14
966. 737. 1703. 12.24 9.34 21.58 1.506 1.148

```
 2.654       0.000       0.000         0.000         0.000
PNW     Landfill Gas                   14
      94.        72.       166.     1.28     0.98     2.26     0.158    0.120
 0.278       0.000       0.000         0.000         0.000
AZNM    Landfill Gas                   14
      74.        56.       130.     0.92     0.69     1.62     0.113    0.085
 0.199       0.000       0.000         0.000         0.000
RMPA    Landfill Gas                   14
       4.         3.         8.     0.06     0.05     0.11     0.008    0.006
 0.013       0.000       0.000         0.000         0.000
NWPE    Landfill Gas                   14
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Landfill Gas                  14
    3785.      2824.      6609.    44.98    33.67    78.65     5.533    4.142
 9.675       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Wind                          15         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Wind                           15
       2.         1.         2.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Wind                           15
     164.        92.       256.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Wind                           15
    1852.      1022.      2874.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Wind                           15
     219.       113.       332.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Wind                           15
      17.        10.        27.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Wind                           15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Wind                           15
      20.        11.        32.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Wind                           15
      88.        49.       137.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Wind                           15
    1498.       837.      2336.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Wind                           15
```

```
      87.        49.       136.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Wind                           15
      29.        16.        45.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Wind                           15
      27.        15.        41.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Wind                           15
      16.         9.        25.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Wind                           15
     865.       444.      1309.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Wind                           15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Wind                           15
      20.        11.        31.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Wind                           15
       2.         1.         3.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Wind                           15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Wind                           15
      57.        32.        88.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Wind                           15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Wind                           15
      66.        37.       102.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Wind                           15
    4635.      2599.      7234.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Wind                           15
     185.       104.       290.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Wind                           15
     603.       314.       917.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Wind                           15
     648.       363.      1011.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Wind                           15
      62.        35.        97.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Wind                         15
   11161.      6166.     17327.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Fuel Cell                    16         (Emissions By R
```

```
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Fuel Cell                     16
      31.         8.        38.     0.23     0.06     0.29     0.046    0.011
 0.057       0.000       0.000         0.015         0.004
MACW    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Fuel Cell                     16
       5.         3.         8.     0.03     0.03     0.06     0.007    0.005
 0.012       0.000       0.000         0.003         0.001
DSNY    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Fuel Cell                     16
       3.         2.         5.     0.03     0.01     0.04     0.005    0.002
 0.007       0.000       0.000         0.002         0.001
FRCC    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
SPPN    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Fuel Cell                     16
      39.        13.        51.     0.29     0.09     0.38     0.058    0.019
 0.077       0.000       0.000         0.020         0.006
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Solar                          17         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                            (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Solar                         17
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Solar                          17
     516.       274.       790.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Solar                          17
      21.        15.        36.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Solar                          17
       5.         3.         7.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Solar                          17
      38.        20.        59.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Solar                         17
     580.       312.       892.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Non Fossil_Other              18         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Non Fossil_Other              18
     145.       115.       260.     1.60     1.26     2.86     0.000    0.000
 0.000       0.000       0.046         0.000         0.000
ECAO    Non Fossil_Other              18
     397.       313.       710.     4.36     3.44     7.81     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Non Fossil_Other              18
      44.        35.        79.     0.48     0.38     0.87     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Non Fossil_Other              18
    1133.       893.      2026.    12.46     9.83    22.29     0.000    0.000
 0.000       0.000       0.791         0.000         0.000
MACW    Non Fossil_Other              18
     525.       414.       938.     5.77     4.55    10.32     0.000    0.000
 0.000       0.000       0.336         0.000         0.000
MACS    Non Fossil_Other              18
     242.       191.       434.     2.67     2.10     4.77     0.000    0.000
 0.000       0.000       0.169         0.000         0.000
WUMS    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Non Fossil_Other              18
      93.        73.       166.     1.02     0.80     1.82     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Non Fossil_Other              18
     150.       118.       268.     1.65     1.30     2.95     0.000    0.000
 0.000       0.000       0.105         0.000         0.000
UPNY    Non Fossil_Other              18
     150.       118.       268.     1.65     1.30     2.95     0.000    0.000
 0.000       0.000       0.105         0.000         0.000
DSNY    Non Fossil_Other              18
     361.       285.       646.     3.98     3.14     7.11     0.000    0.000
 0.000       0.000       0.252         0.000         0.000
NYC     Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Non Fossil_Other              18
     604.       476.      1080.     6.64     5.24    11.88     0.000    0.000
 0.000       0.000       0.355         0.000         0.000
NENG    Non Fossil_Other              18
    2367.      1867.      4234.    26.04    20.53    46.57     0.000    0.000
 0.000       0.000       1.647         0.000         0.000
FRCC    Non Fossil_Other              18
    1869.      1474.      3343.    20.56    16.21    36.77     0.000    0.000
 0.000       0.000       1.120         0.000         0.000
VACA    Non Fossil_Other              18
     617.       487.      1104.     6.79     5.35    12.14     0.000    0.000
```

```
 0.000       0.000       0.431         0.000         0.000
TVA     Non Fossil_Other              18
      53.        42.        95.     0.58     0.46     1.04     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Non Fossil_Other              18
     137.       108.       244.     1.50     1.19     2.69     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Non Fossil_Other              18
     101.        80.       181.     0.48     0.38     0.87     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Non Fossil_Other              18
     785.       619.      1403.     9.00     7.10    16.10     0.000    0.000
 0.000       0.000       0.225         0.000         0.000
PNW     Non Fossil_Other              18
     256.       202.       457.     2.81     2.22     5.03     0.000    0.000
 0.000       0.000       0.102         0.000         0.000
AZNM    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Non Fossil_Other              18
   10028.      7909.     17936.   110.04    86.79   196.83     0.000    0.000
 0.000       0.000       5.684         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Fossil_Other                 19         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Fossil_Other                  19
     268.       205.       473.     2.95     2.25     5.20     0.614    0.468
 1.082       0.000       0.000         0.000         0.000
ERCT    Fossil_Other                  19
       9.         7.        16.     0.10     0.08     0.17     0.020    0.016
 0.036       0.000       0.000         0.000         0.000
MACE    Fossil_Other                  19
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Fossil_Other                  19
       9.         7.        16.     0.10     0.08     0.17     0.020    0.016
 0.036       0.000       0.000         0.000         0.000
MAPP    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Fossil_Other                  19
      89.        68.       158.     0.98     0.75     1.73     0.064    0.049
 0.114       0.000       0.000         0.000         0.000
PNW     Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
NWPE    Fossil_Other                  19
     183.       140.       323.     2.02     1.54     3.56     0.706    0.538
 1.244       0.012       0.018         0.000         0.000

Total Fossil_Other                 19
     559.       426.       985.     6.15     4.69    10.84     1.425    1.087
 2.512       0.012       0.018         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Pump Storage                  20         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Pump Storage                  20
    1115.       839.      1954.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Pump Storage                  20
     152.       110.       262.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Pump Storage                  20
     276.       199.       474.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Pump Storage                  20
     243.       175.       418.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Pump Storage                  20
     197.       142.       339.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Pump Storage                  20
      92.       155.       247.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
NENG    Pump Storage                  20
     405.       292.       697.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Pump Storage                  20
    1953.      1410.      3363.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Pump Storage                  20
     316.       687.      1003.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Pump Storage                  20
     292.       635.       927.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Pump Storage                  20
      32.        37.        69.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Pump Storage                  20
       0.        43.        43.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Pump Storage                  20
       0.       428.       428.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Pump Storage                  20
      64.        46.       110.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Pump Storage                 20
    5136.      5199.     10335.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Int. Imports                 21         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                           (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Int. Imports                  21
```

```
       1.         1.         2.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Int. Imports                  21
       1.         1.         2.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Int. Imports                  21
       2.         1.         3.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Int. Imports                  21
    4905.      3540.      8445.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
PNW     Int. Imports                  21
    7601.      5486.     13087.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Int. Imports                  21
   12510.      9028.     21538.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Cgn_Coal                      22         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Cgn_Coal                      22
     223.       151.       373.     2.31     1.56     3.88     0.468    0.316
 0.784       1.940       0.007         0.361         0.099
ECAO    Cgn_Coal                      22
     678.       466.      1144.     6.18     4.18    10.37     1.382    0.954
 2.335       4.736       0.019         0.965         0.263
ERCT    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Cgn_Coal                      22
      32.        26.        59.     0.29     0.23     0.52     0.058    0.047
 0.104       0.286       0.001         0.048         0.013
MACW    Cgn_Coal                      22
    1848.      1242.      3089.    16.47    10.83    27.30     3.105    2.011
 5.116      12.201       0.062         2.542         0.693
MACS    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Cgn_Coal                      22
      61.        49.       110.     0.51     0.41     0.92     0.094    0.076
 0.171       0.459       0.003         0.089         0.024
MANO    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Cgn_Coal                      22
     312.       252.       563.     2.79     2.25     5.03     0.706    0.570
 1.276       1.283       0.009         0.469         0.128
UPNY    Cgn_Coal                      22
     704.       568.      1273.     5.84     4.71    10.55     0.922    0.744
```

```
 1.666       3.166       0.017         0.983         0.268
DSNY    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Cgn_Coal                      22
     308.       248.       556.     2.63     2.12     4.75     0.566    0.456
 1.022       2.614       0.012         0.443         0.121
FRCC    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Cgn_Coal                      22
    3882.      3133.      7015.    33.49    27.02    60.51     6.222    5.022
11.244      29.672       0.111         5.635         1.537
TVA     Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Cgn_Coal                      22
       4.         3.         7.     0.04     0.03     0.07     0.007    0.006
 0.013       0.036       0.000         0.006         0.002
ENTG    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Cgn_Coal                      22
    1243.      1003.      2246.    10.63     8.57    19.20     2.067    1.668
 3.734       9.600       0.034         1.788         0.488
CALI    Cgn_Coal                      22
    1356.      1094.      2450.    12.37     9.98    22.36     0.557    0.449
 1.006      10.319       0.041         2.082         0.568
PNW     Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Cgn_Coal                      22
     223.       180.       402.     1.81     1.46     3.28     0.325    0.263
 0.588       1.638       0.007         0.316         0.086

Total Cgn_Coal                     22
   10872.      8414.     19287.    95.35    73.38   168.73    16.478   12.581
29.060      77.949       0.323        15.727         4.289
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Cgn_Gas                      23         (Emissions By R
egion)       Generation                    Trillion                  Emission
```

		Emission (GWh)	Emission (1000 Tons)	Emission (Tons)	Emission (Btu)			Emission (Mil Tonnes)			Emission (1000 Tons)	
		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total
MECS	Cgn_Gas	4197.	2686.	6884.	23 30.93	20.73	51.66	2.074	1.321	3.395	0.000	0.000
ECAO	Cgn_Gas	1129.	865.	1994.	23 8.70	6.65	15.35	0.111	0.084	0.195	0.000	0.000
ERCT	Cgn_Gas	7415.	11930.	19345.	23 57.08	92.28	149.37	1.345	2.472	3.817	0.000	0.000
MACE	Cgn_Gas	5088.	3720.	8808.	23 38.14	28.19	66.33	1.410	0.989	2.398	0.000	0.000
MACW	Cgn_Gas	114.	189.	303.	23 1.06	1.81	2.88	0.096	0.149	0.245	0.000	0.000
MACS	Cgn_Gas	186.	143.	329.	23 1.83	1.40	3.23	0.073	0.056	0.129	0.000	0.000
WUMS	Cgn_Gas	0.	0.	0.	23 0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
MANO	Cgn_Gas	44.	29.	72.	23 0.33	0.23	0.56	0.004	0.004	0.009	0.000	0.000
MAPP	Cgn_Gas	7.	16.	23.	23 0.08	0.17	0.25	0.003	0.007	0.011	0.000	0.000
UPNY	Cgn_Gas	7305.	3352.	10657.	23 59.81	27.31	87.12	5.428	2.488	7.916	0.000	0.000
DSNY	Cgn_Gas	890.	269.	1159.	23 8.39	2.53	10.92	0.784	0.237	1.021	0.000	0.000
NYC	Cgn_Gas	124.	97.	222.	23 1.13	0.88	2.01	0.105	0.082	0.187	0.000	0.000
LILC	Cgn_Gas	277.	275.	552.	23 2.27	2.38	4.65	0.203	0.215	0.418	0.000	0.000
NENG	Cgn_Gas	966.	861.	1827.	23 8.23	7.26	15.49	0.465	0.414	0.879	0.000	0.000
FRCC	Cgn_Gas	598.	1622.	2220.	23 5.42	14.85	20.28	0.361	0.996	1.357	0.000	0.000
VACA	Cgn_Gas	3074.	2197.	5271.	23 22.95	16.83	39.78	0.614	0.419	1.032	0.000	0.000
TVA	Cgn_Gas	2601.	2048.	4649.	23 19.51	15.54	35.05	0.195	0.173	0.368	0.000	0.000
SOU	Cgn_Gas	6488.	4465.	10953.	23 49.57	34.34	83.91	0.809	0.565	1.375	0.000	0.000
ENTG	Cgn_Gas	4175.	2828.	7003.	23 31.31	21.32	52.64	0.316	0.270	0.586	0.000	0.000

```
SPPN    Cgn_Gas                        23
       0.         8.         8.     0.00     0.08     0.08     0.000    0.003
 0.003       0.000       0.000         0.005         0.001
SPPS    Cgn_Gas                        23
    4015.      3835.      7850.    30.36    30.38    60.74     0.357    0.668
 1.026       0.000       0.000         3.223         0.879
CALI    Cgn_Gas                        23
   23601.     13141.     36742.   200.69   105.84   306.52     3.916    1.704
 5.620       0.000       0.000        16.267         4.437
PNW     Cgn_Gas                        23
    5024.      3854.      8878.    39.24    30.10    69.33     1.126    0.864
 1.989       0.000       0.000         3.680         1.004
AZNM    Cgn_Gas                        23
    4981.      3618.      8600.    39.34    28.28    67.62     1.222    0.794
 2.015       0.000       0.000         3.589         0.979
RMPA    Cgn_Gas                        23
     811.        42.       853.     7.00     0.36     7.36     0.400    0.021
 0.421       0.000       0.000         0.390         0.106
NWPE    Cgn_Gas                        23
      45.        34.        79.     0.29     0.22     0.51     0.021    0.016
 0.037       0.000       0.000         0.027         0.007

Total Cgn_Gas                       23
   83156.     62124.    145280.   663.65   489.99  1153.64    21.439   15.011
36.450       0.000       0.000        61.224        16.697
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Cgn_Oil                        24         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
               (GWh)                          (Btu)                  (1000 Tons)
          (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
MANO    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Cgn_Oil                        24
       0.        29.        29.     0.00     0.25     0.25     0.000    0.037
 0.037       0.000       0.000         0.013         0.004
VACA    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Cgn_Oil                        24
    1741.      1124.      2864.    13.16     8.50    21.66     0.099    0.064
 0.162       0.000       0.000         1.150         0.314
PNW     Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Cgn_Oil                         24
    1741.      1153.      2894.    13.16     8.75    21.92     0.099    0.100
 0.199       0.000       0.000         1.163         0.317
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Cgn_Other                     25         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Cgn_Other                     25
     316.       244.       561.     1.68     1.30     2.98     0.007    0.005
 0.012       0.050       0.062         0.000         0.000
ECAO    Cgn_Other                     25
      26.        20.        46.     0.22     0.17     0.39     0.002    0.002
 0.004       0.016       0.000         0.000         0.000
ERCT    Cgn_Other                     25
      41.        31.        71.     0.25     0.19     0.44     0.045    0.034
 0.079       0.000       0.004         0.000         0.000
MACE    Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Cgn_Other                     25
     156.       121.       277.     0.83     0.64     1.48     0.004    0.003
 0.007       0.027       0.007         0.000         0.000
MACS    Cgn_Other                     25
     234.       181.       415.     0.98     0.76     1.74     0.000    0.000
 0.000       0.000       0.062         0.000         0.000
WUMS    Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Cgn_Other                     25
       9.         7.        15.     0.04     0.03     0.06     0.000    0.000
 0.000       0.000       0.002         0.000         0.000
UPNY    Cgn_Other                     25
     191.       147.       338.     2.55     1.97     4.52     0.000    0.000
 0.000       0.000       0.160         0.000         0.000
DSNY    Cgn_Other                     25
      30.        23.        54.     0.13     0.10     0.23     0.000    0.000
 0.000       0.000       0.008         0.000         0.000
NYC     Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Cgn_Other                     25
     429.       199.       628.     2.85     1.07     3.92     0.027    0.009
 0.036       0.144       0.010         0.000         0.000
FRCC    Cgn_Other                     25
     360.       278.       638.     2.99     2.31     5.30     0.023    0.017
 0.040       0.160       0.001         0.000         0.000
VACA    Cgn_Other                     25
     191.       147.       338.     1.44     1.11     2.55     0.013    0.010
 0.022       0.089       0.012         0.000         0.000
```

```
TVA     Cgn_Other                       25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Cgn_Other                       25
      22.        17.        38.     0.19     0.14     0.33     0.002    0.001
 0.003       0.013       0.000         0.000         0.000
ENTG    Cgn_Other                       25
     795.       607.      1402.     4.81     3.67     8.49     0.942    0.719
 1.661       0.021       0.083         0.000         0.000
SPPN    Cgn_Other                       25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Cgn_Other                       25
     156.       121.       277.     0.66     0.51     1.17     0.001    0.001
 0.001       0.005       0.000         0.000         0.000
CALI    Cgn_Other                       25
     576.       444.      1020.     4.10     3.16     7.26     0.078    0.060
 0.139       0.210       0.016         0.000         0.000
PNW     Cgn_Other                       25
     416.       321.       738.     3.55     2.75     6.30     0.036    0.027
 0.063       0.252       0.002         0.000         0.000
AZNM    Cgn_Other                       25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Cgn_Other                       25
      30.        23.        54.     0.24     0.19     0.43     0.002    0.002
 0.004       0.017       0.000         0.000         0.000
NWPE    Cgn_Other                       25
      43.        33.        77.     0.18     0.14     0.32     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Cgn_Other                     25
    4021.      2965.      6985.    27.70    20.22    47.91     1.181    0.891
 2.072       1.004       0.429         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: NonCG IPP_Coal                26         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
MACW NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE NonCG IPP_Coal 26

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: NonCG IPP_Gas                27         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
NENG    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: NonCG IPP_Other              28         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
ECAO NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW NonCG IPP_Other 28

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Blr_Coal                      29         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
DSNY    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Coal                        29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Blr_Gas                      30         (Emissions By R
egion)       Generation                   Trillion                  Emission
          Emission    Emission      Emission       Emission
```

```
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Blr_Gas                        30
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Blr_Oil                        31         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
               (GWh)                            (Btu)                  (1000 Tons)
          (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MANO    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Blr_Other                     32         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Blr_Other                     32
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: SteamOnly Cogen              33         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MACW    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000

Total SteamOnly Cogen                33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Rep.Coal-CC                  34         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Rep.Coal-CC                  34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Rep.Coal-CC                  34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Rep.Coal-CC                  34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Rep.Coal-CC                  34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Rep.Coal-CC                  34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Rep.Coal-CC                  34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Rep.Coal-CC                  34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Rep.Coal-CC                  34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Rep.Coal-CC                  34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Rep.Coal-CC                  34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Rep.Coal-CC                  34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Rep.Coal-CC                  34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Rep.Coal-CC                  34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Rep.Coal-CC                  34
```

```
     955.       732.      1687.     6.89     5.29    12.18     0.069    0.053
 0.122       0.000       0.000        0.646         0.176
FRCC    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
VACA    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
TVA     Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
SOU     Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
ENTG    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
SPPN    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
SPPS    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
CALI    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
PNW     Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
AZNM    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
RMPA    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
NWPE    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000

Total Rep.Coal-CC                    34
     955.       732.      1687.     6.89     5.29    12.18     0.069    0.053
 0.122       0.000       0.000        0.646         0.176
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Rep.O/G-CC                   35         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Rep.O/G-CC                   35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
```

```
ECAO    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Rep.O/G-CC                    35
    1441.      1105.      2547.    10.41     7.98    18.39     0.104    0.080
 0.184       0.000       0.000         0.976         0.266
NENG    Rep.O/G-CC                    35
      59.        45.       104.     0.43     0.33     0.75     0.004    0.003
 0.008       0.000       0.000         0.040         0.011
FRCC    Rep.O/G-CC                    35
   13210.     10133.     23344.    95.38    73.16   168.54     0.954    0.732
 1.685       0.000       0.000         8.945         2.439
VACA    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Rep.O/G-CC                    35
   18946.     14532.     33478.   136.79   104.92   241.71     1.368    1.049
 2.417       0.000       0.000        12.828         3.498
PNW     Rep.O/G-CC                    35
     421.       323.       744.     3.04     2.33     5.37     0.030    0.023
```

```
 0.054       0.000       0.000         0.285         0.078
AZNM    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Rep.O/G-CC                    35
   34077.     26139.     60217.   246.04   188.73   434.77     2.460    1.887
 4.348       0.000       0.000        23.073         6.293
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Rep.Coal-IGCC                 36         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Rep.Coal-IGCC                 36
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.Scrubber                 37         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
```

		(GWh)			(Btu)			(1000 Tons)	
		(1000 Tons)		(Tons)	(Mil Tonnes)		(Mil Tonnes)		
	WINTER Total	SUMMER Total	Total	WINTER Total	SUMMER	Total Total	WINTER	SUMMER
MECS	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
ECAO	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
ERCT	Ret.Scrubber			37				
	7614.	6203.	13817.	81.48	66.45	147.93	12.212	9.956
22.167	21.450	0.614		14.453		3.942		
MACE	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
MACW	Ret.Scrubber			37				
	268.	213.	480.	2.55	2.03	4.58	0.481	0.382
0.863	0.201	0.001		0.426		0.116		
MACS	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
WUMS	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
MANO	Ret.Scrubber			37				
	2730.	2169.	4899.	27.04	21.47	48.51	3.961	3.146
7.107	4.000	0.060		4.518		1.232		
MAPP	Ret.Scrubber			37				
	6176.	4905.	11081.	70.44	55.95	126.39	25.997	20.647
46.643	7.331	0.356		12.349		3.368		
UPNY	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
DSNY	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
NYC	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
LILC	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
NENG	Ret.Scrubber			37				
	417.	332.	749.	4.11	3.26	7.37	0.485	0.385
0.870	0.162	0.006		0.686		0.187		
FRCC	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
VACA	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
TVA	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
SOU	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
ENTG	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000		
SPPN	Ret.Scrubber			37				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000

```
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Scrubber                  37
   17205.     13820.     31026.   185.63   149.16   334.78    43.135   34.516
77.651      33.144       1.037        32.433         8.845
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistSCR & Scrub          38         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSCR & Scrub          38
   49431.     39259.     88690.   473.37   375.96   849.34    12.911   10.254
23.164      81.180       0.418        79.092        21.571
ERCT    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSCR & Scrub          38
     813.       645.      1458.     8.63     6.85    15.48     0.211    0.168
 0.379       0.681       0.014         1.442         0.393
MACW    Ret.ExistSCR & Scrub          38
   11129.      8839.     19967.   104.72    83.17   187.90     2.560    2.033
 4.593      23.487       0.225        17.498         4.772
MACS    Ret.ExistSCR & Scrub          38
    6562.      5212.     11773.    65.99    52.41   118.40     1.512    1.201
 2.712       8.549       0.069        11.026         3.007
WUMS    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSCR & Scrub          38
```

```
    2251.      1788.      4039.    23.53    18.69    42.22     0.859    0.682
 1.541       5.277       0.017         3.931         1.072
MAPP    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSCR & Scrub          38
    1759.      1397.      3157.    17.34    13.77    31.11     0.858    0.682
 1.540       1.369       0.029         2.897         0.790
FRCC    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSCR & Scrub          38
   23867.     18956.     42823.   227.77   180.90   408.68     4.837    3.841
 8.678      29.611       0.254        38.057        10.379
TVA     Ret.ExistSCR & Scrub          38
    5469.      4343.      9812.    51.67    41.04    92.70     1.033    0.820
 1.853      11.588       0.037         8.633         2.354
SOU     Ret.ExistSCR & Scrub          38
   25150.     19975.     45125.   243.75   193.59   437.34     5.218    4.144
 9.362      32.878       0.232        40.726        11.107
ENTG    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR & Scrub          38
  126430.    100414.    226844.  1216.77   966.39  2183.16    29.997   23.825
53.822     194.620       1.295       203.301        55.446
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------

--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistSNCR & Scrub         39         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total          Total

MECS    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
ECAO    Ret.ExistSNCR & Scrub         39
    9995.      7938.     17933.    95.41    75.77   171.18    14.066   11.171
25.237      18.342       0.258        15.941          4.348
ERCT    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACE    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACW    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACS    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
WUMS    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MANO    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MAPP    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
UPNY    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
DSNY    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
NYC     Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
LILC    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
NENG    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
FRCC    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
VACA    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
TVA     Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR & Scrub         39
    9995.      7938.     17933.    95.41    75.77   171.18    14.066   11.171
25.237      18.342       0.258        15.941         4.348
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.SCR                       40         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SCR                       40
    5806.      4611.     10417.    54.26    43.10    97.36     1.448    1.150
 2.598      48.679       0.128         9.066         2.473
ECAO    Ret.SCR                       40
   31795.     23421.     55215.   305.15   224.41   529.56     9.374    6.923
16.298     270.789       0.908        49.520        13.505
ERCT    Ret.SCR                       40
    2250.      3941.      6191.    22.58    39.87    62.45     0.565    1.004
 1.568      31.225       0.055         6.025         1.643
MACE    Ret.SCR                       40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.SCR                       40
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.SCR                        40
    3042.      2207.      5249.    31.19    22.51    53.70     0.780    0.563
 1.342      22.644       0.169         5.181         1.413
MANO    Ret.SCR                        40
    6446.      4418.     10864.    66.66    45.56   112.22     2.317    1.571
 3.888      53.611       0.166        10.520         2.869
MAPP    Ret.SCR                        40
   12716.      8954.     21671.   130.33    91.77   222.10     3.566    2.499
 6.064      96.623       0.507        21.192         5.780
UPNY    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.SCR                        40
    6100.      4879.     10979.    59.00    47.19   106.18     1.475    1.180
 2.655      53.092       0.158         9.888         2.697
VACA    Ret.SCR                        40
    2417.      1920.      4337.    24.81    19.70    44.51     0.665    0.528
 1.194      24.482       0.074         4.145         1.130
TVA     Ret.SCR                        40
    2341.      1859.      4200.    24.52    19.48    44.00     0.613    0.487
 1.100      21.998       0.058         4.097         1.117
SOU     Ret.SCR                        40
   13093.     10399.     23492.   124.44    98.84   223.28     3.365    2.673
 6.038     112.500       0.332        20.792         5.671
ENTG    Ret.SCR                        40
    7343.      5832.     13175.    74.71    59.34   134.05     1.934    1.536
 3.470      44.733       0.421        12.933         3.527
SPPN    Ret.SCR                        40
    2352.      1868.      4220.    23.99    19.05    43.04     0.778    0.618
 1.396      21.521       0.084         4.058         1.107
SPPS    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.SCR                        40
   95701.     74309.    170009.   941.65   730.80  1672.45    26.879   20.732
47.611     801.898       3.058       157.417        42.932
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistScrub & SCR          41         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                            (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub & SCR          41
   52736.     41884.     94621.   523.44   415.72   939.16    13.749   10.920
24.669     207.302       0.428        87.457        23.852
ERCT    Ret.ExistScrub & SCR          41
    9597.      7979.     17576.    98.59    81.94   180.53     2.465    2.049
 4.513      30.307       0.393        17.572         4.792
MACE    Ret.ExistScrub & SCR          41
    2411.      1915.      4326.    24.06    19.11    43.18     0.602    0.478
 1.079       3.277       0.040         4.021         1.097
MACW    Ret.ExistScrub & SCR          41
    7574.      6016.     13590.    70.28    55.81   126.09     1.757    1.395
 3.152       5.655       0.116        11.742         3.202
MACS    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistScrub & SCR          41
    3013.      2393.      5406.    30.95    24.58    55.53     0.902    0.717
 1.619       9.837       0.018         5.171         1.410
MAPP    Ret.ExistScrub & SCR          41
    3615.      2871.      6486.    35.96    28.56    64.51     0.899    0.714
 1.613       6.593       0.106         6.224         1.698
UPNY    Ret.ExistScrub & SCR          41
     618.       491.      1110.     5.85     4.64    10.49     0.146    0.116
 0.262       0.462       0.010         0.977         0.266
DSNY    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistScrub & SCR          41
     789.       637.      1426.     7.64     6.16    13.80     0.191    0.154
```

```
 0.345       0.759       0.013         1.285         0.351
FRCC    Ret.ExistScrub & SCR          41
   18560.     14740.     33300.   182.91   145.27   328.18     4.630    3.677
 8.308      80.277       0.121        30.561         8.335
VACA    Ret.ExistScrub & SCR          41
    1121.       890.      2011.    11.07     8.79    19.86     0.315    0.251
 0.566       1.400       0.005         1.850         0.504
TVA     Ret.ExistScrub & SCR          41
     515.       409.       923.     5.48     4.35     9.83     0.137    0.109
 0.246       2.950       0.002         0.916         0.250
SOU     Ret.ExistScrub & SCR          41
    3619.      2874.      6493.    37.99    30.17    68.16     0.950    0.754
 1.704      16.849       0.023         6.348         1.731
ENTG    Ret.ExistScrub & SCR          41
    2781.      2208.      4989.    27.95    22.19    50.14     0.699    0.555
 1.254       5.616       0.055         4.837         1.319
SPPN    Ret.ExistScrub & SCR          41
    4059.      3059.      7118.    41.37    31.01    72.39     1.034    0.775
 1.810      11.978       0.080         6.984         1.905
SPPS    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub & SCR          41
  111008.     88366.    199374.  1103.53   878.34  1981.87    28.476   22.664
51.140     383.262       1.409       185.945        50.712
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.SNCR                     42         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SNCR                      42
```

```
    1767.      1100.      2867.    18.51    11.52    30.02     4.009    2.504
 6.513      15.942       0.048        2.796         0.762
ERCT    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
MACE    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
MACW    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
MACS    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
WUMS    Ret.SNCR                      42
     747.       593.      1340.     8.74     6.94    15.68     1.332    1.058
 2.391       7.838       0.004        1.460         0.398
MANO    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
MAPP    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
UPNY    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
DSNY    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
NYC     Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
LILC    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
NENG    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
FRCC    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
VACA    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
TVA     Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
SOU     Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
ENTG    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
SPPN    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
SPPS    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
CALI    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
PNW     Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
```

```
AZNM    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SNCR                      42
    2514.      1693.      4207.    27.24    18.45    45.70     5.341    3.563
 8.904      23.780       0.052         4.256         1.161
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistScrub & SNCR         43         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub & SNCR         43
     722.       574.      1296.     8.00     6.36    14.36     1.362    1.082
 2.444       2.896       0.012         1.337         0.365
ERCT    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistScrub & SNCR         43
     219.       169.       389.     2.28     1.76     4.04     0.593    0.458
 1.052       1.153       0.007         0.377         0.103
MANO    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub & SNCR         43
     942.       743.      1685.    10.28     8.12    18.40     1.955    1.540
 3.496       4.048       0.018         1.714         0.467
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.SCR+Scrb                 44         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
```

		(1000 Tons)			(Tons)			(Mil Tonnes)			(Mil Tonnes)	
		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER	Total Total	WINTER	SUMMER			
MECS	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
ECAO	Ret.SCR+Scrb				44							
		65942.	52373.	118315.	640.83	508.96	1149.79	16.962	13.471	30.433	101.713	0.847
ERCT	Ret.SCR+Scrb				44							
		4582.	3639.	8221.	48.61	38.61	87.22	1.215	0.965	2.180	5.579	0.134
MACE	Ret.SCR+Scrb				44							
		741.	598.	1339.	6.32	5.10	11.43	0.158	0.128	0.286	0.503	0.011
MACW	Ret.SCR+Scrb				44							
		13302.	10565.	23868.	128.73	102.24	230.98	3.218	2.556	5.774	14.444	0.193
MACS	Ret.SCR+Scrb				44							
		10271.	8158.	18429.	96.77	76.86	173.62	2.908	2.310	5.218	8.411	0.142
WUMS	Ret.SCR+Scrb				44							
		5524.	4388.	9912.	56.59	44.95	101.54	1.415	1.124	2.538	4.275	0.179
MANO	Ret.SCR+Scrb				44							
		25247.	20052.	45299.	257.90	204.83	462.72	7.747	6.153	13.900	45.653	0.173
MAPP	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
UPNY	Ret.SCR+Scrb				44							
		3246.	2578.	5825.	34.47	27.38	61.85	0.862	0.684	1.546	2.721	0.057
DSNY	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
NYC	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
LILC	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000
NENG	Ret.SCR+Scrb				44							
		5571.	4424.	9995.	53.23	42.27	95.50	1.331	1.057	2.387	3.921	0.079
FRCC	Ret.SCR+Scrb				44							
		5664.	4498.	10162.	54.04	42.92	96.96	1.378	1.094	2.472	12.120	0.039
VACA	Ret.SCR+Scrb				44							
		22140.	17594.	39734.	212.36	168.76	381.12	5.320	4.228	9.548	12.255	0.108
TVA	Ret.SCR+Scrb				44							
		6858.	5447.	12306.	68.85	54.68	123.53	1.721	1.367	3.088	5.332	0.036
SOU	Ret.SCR+Scrb				44							
		28093.	22312.	50405.	277.77	220.61	498.37	7.044	5.595	12.639	37.294	0.218
ENTG	Ret.SCR+Scrb				44							
		3311.	2630.	5941.	36.32	28.85	65.17	0.908	0.721	1.629	4.888	0.106
SPPN	Ret.SCR+Scrb				44							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000

```
SPPS    Ret.SCR+Scrb                  44
   10511.      8348.     18859.   109.93    87.31   197.25     2.748    2.183
 4.931       5.917       0.050        18.368         5.009
CALI    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SCR+Scrb                  44
  211006.    167605.    378610.  2082.71  1654.32  3737.04    54.936   43.636
98.572     265.026       2.371       348.462        95.035
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.SNCR+Scrub                45         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SNCR+Scrub                45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------
                                                                                                NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.Gas Reburn                46         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total          Total

MECS    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
ECAO    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
ERCT    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACE    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACW    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACS    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
WUMS    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MANO    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MAPP    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
UPNY    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
DSNY    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
NYC     Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
LILC    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
NENG    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
FRCC    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
VACA    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
TVA     Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
```

```
SOU     Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistScrub+GasR          47         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
MACS Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2015, Plant Type: Ret.GasReburn+Scrub 48 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
FRCC    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ACI                       49         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
ERCT Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.ACI 49

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI                         49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistScrub&ACI            50         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub&ACI            50
     405.       327.       731.     4.41     3.56     7.96     0.883    0.713
 1.596       2.102       0.007         0.741         0.202
MACS    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
NYC     Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub&ACI            50
     405.       327.       731.     4.41     3.56     7.96     0.883    0.713
 1.596       2.102       0.007         0.741         0.202
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistSCR&ACI              51         (Emissions By R
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)
```

		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
ECAO	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
ERCT	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MACE	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MACW	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MACS	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
WUMS	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MANO	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MAPP	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
UPNY	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
DSNY	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
NYC	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
LILC	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
NENG	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
FRCC	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
VACA	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
TVA	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
SOU	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
ENTG	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
SPPN	Ret.ExistSCR&ACI				51				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
SPPS	Ret.ExistSCR&ACI				51				

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistSNCR&ACI            52         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MAPP    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

```
                                                                                                                NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ACI & SCR                 53         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total          Total

MECS    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
ECAO    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
ERCT    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACE    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACW    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACS    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
WUMS    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MANO    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MAPP    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
UPNY    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
DSNY    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
NYC     Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
LILC    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
NENG    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
FRCC    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
VACA    Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
TVA     Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
SOU     Ret.ACI & SCR                 53
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistScrub&ACI&SCR        54         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MACS    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub&ACI&SCR        54
```

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2015, Plant Type: Ret.ACI & SNCR 55 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ACI & SNCR 55

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistScrub&ACI&SNCR       56         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

ERCT Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ACI & Srub                57         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ACI & Srub                57
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistSCR&ACI&Scrub        58         (Emissions By R
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)
```

		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
ECAO	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
ERCT	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MACE	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MACW	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MACS	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
WUMS	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MANO	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
MAPP	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
UPNY	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
DSNY	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
NYC	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
LILC	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
NENG	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
FRCC	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
VACA	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
TVA	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
SOU	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
ENTG	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
SPPN	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
SPPS	Ret.ExistSCR&ACI&Scrub	58							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000

```
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistSNCR&ACI&Scrub       59         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSNCR&ACI&Scrub       59
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

```
                                                                                                                NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistSNCR&ExistScrub&ACI  60         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.ExistSCR&ExistScrub&ACI   61         (Emissions By R
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSCR&ExistScrub&ACI   61
    5155.      4094.      9248.    48.30    38.36    86.67     1.579    1.254
 2.834       9.533       0.080         8.071         2.201
MACW    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSCR&ExistScrub&ACI   61
```

```
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR&ExistScrub&ACI   61
    5155.       4094.       9248.    48.30    38.36    86.67     1.579    1.254
```

2.834 9.533 0.080 8.071 2.201

NOx

SO2 MER CO2 Carbon

Year: 2015, Plant Type: Ret.ExistNOx&ExistScrub&ACI 62 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.SCR & Scrub & ACI         63         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.SCR & Scrub & ACI         63
```

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

RMPA Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2015, Plant Type: Ret.SNCR & Scrub & ACI 64 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.O/G SCR                  65         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                            (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
```

Total	Total	Total	Total	Total						
MECS	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
ECAO	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
ERCT	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MACE	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MACW	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MACS	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
WUMS	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MANO	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MAPP	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
UPNY	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
DSNY	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
NYC	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
LILC	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
NENG	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
FRCC	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
VACA	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
TVA	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
SOU	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
ENTG	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
SPPN	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
SPPS	Ret.O/G SCR			65						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000

```
CALI    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.O/G SNCR                 66         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.O/G SNCR                   66
       0.      1662.      1662.     0.00    16.19    16.19     0.000    1.220
 1.220       0.000       0.000         0.859         0.234
MACE    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.O/G SNCR                  66
       0.      1662.      1662.     0.00    16.19    16.19     0.000    1.220
 1.220       0.000       0.000         0.859         0.234
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
```

NOx

```
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.Nuclear (age 30+10 yrs)   67         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
ENTG    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Ret.Nuclear (age 40+20 yrs)   68         (Emissions By R
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------
              (GWh)                         (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```


NOx
SO2 MER CO2 Carbon
Year: 2015, Plant Type: Ret. Biomass Cofiring 69 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
VACA    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: CT Early Retirement           70         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
MACE CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA CT Early Retirement 70

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: CC Early Retirement           71         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
LILC    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: O/G Early Retirement          72         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
               (GWh)                           (Btu)                  (1000 Tons)
          (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

MECS O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI O/G Early Retirement 72

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, Plant Type: Coal Early Retirement         73         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
UPNY    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2           Carbon
```

Year: 2015, Plant Type: Nuke Early Retirement 74 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
ECAO	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
ERCT	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MACE	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MACW	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MACS	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
WUMS	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MANO	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MAPP	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
UPNY	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
DSNY	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
NYC	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
LILC	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
NENG	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
FRCC	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
VACA	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
TVA	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
SOU	Nuke Early Retirement			74				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
ENTG	Nuke Early Retirement			74				

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2015, System Totals (By Region)Generation Trillion
             Emission                      Emission                  Emission
          Emission    Emission
------------------------------------ (GWh)
              (Btu)                        (1000 Tons)              (1000 Tons)
          (Tons)      (Mil Tonnes)(Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Region MECS
   61908.     46567.    108476.   576.03   438.94  1014.98    51.546   37.937
89.483     363.772       1.501        79.097        21.572
Region ECAO
  334023.    254001.    588025.  3234.08  2456.74  5690.82   157.877  115.598  2
73.476    1123.859       4.533       482.082       131.477
Region ERCT
  163027.    169733.    332760.  1422.05  1515.37  2937.42    70.597   91.289  1
61.885     243.652       2.442       175.117        47.759
Region MACE
   77632.     58026.    135658.   732.92   549.18  1282.11    16.183   12.055
28.238      72.280       1.164        38.230        10.426
Region MACW
   66735.     49227.    115962.   624.45   463.34  1087.80    22.027   15.488
37.515     106.953       1.140        72.614        19.804
Region MACS
   29737.     22461.     52198.   292.72   223.09   515.81     8.432    6.548
14.981      33.235       0.458        31.459         8.580
```

```
Region WUMS
   38694.     28882.     67576.   383.33   289.18   672.51    35.727   27.249
62.976     167.599       1.048        50.093        13.662
Region MANO
  142864.    105909.    248773.  1452.52  1080.81  2533.33    70.035   49.330  1
19.365     389.944       1.769       131.321        35.815
Region MAPP
  103807.     79267.    183074.  1025.59   782.35  1807.93   152.543  115.524  2
68.067     453.834       3.623       142.768        38.937
Region UPNY
   49549.     35976.     85524.   332.13   254.92   587.05    17.901   12.396
30.297      71.617       0.651        26.842         7.320
Region DSNY
   16747.     13713.     30460.   134.52   112.70   247.22     7.346    5.257
12.603      28.477       0.353        11.588         3.160
Region NYC
    6702.      7542.     14245.    50.57    63.99   114.55     1.156    3.114
 4.270       0.000       0.000         6.079         1.658
Region LILC
   12288.      9331.     21619.    91.07    71.08   162.14     1.203    1.158
 2.361       0.000       0.355         7.974         2.175
Region NENG
   87866.     62364.    150231.   677.76   489.97  1167.73    11.602    8.710
20.313      20.909       1.853        46.581        12.704
Region FRCC
  116778.    106728.    223506.  1049.90   963.33  2013.23    26.005   27.333
53.339     175.626       1.546       115.474        31.493
Region VACA
  192183.    150854.    343037.  1790.77  1429.17  3219.94    62.806   50.024  1
12.830     342.996       1.840       170.594        46.526
Region TVA
  116127.     90798.    206925.  1028.50   826.88  1855.39    39.939   32.245
72.184     303.029       0.899       110.372        30.101
Region SOU
  188622.    147822.    336445.  1680.32  1348.62  3028.93    57.274   48.919  1
06.194     434.904       1.486       200.238        54.610
Region ENTG
   91980.     72760.    164740.   862.30   679.13  1541.43    31.528   25.198
56.726     178.763       1.553        81.454        22.215
Region SPPN
   45681.     36903.     82584.   459.96   374.64   834.61    67.445   53.924  1
21.368     122.282       1.325        67.939        18.529
Region SPPS
   77342.     73117.    150458.   654.80   628.23  1283.03    62.507   58.985  1
21.492     187.866       1.403        99.564        27.154
Region CALI
  168703.    127429.    296133.  1387.64  1014.49  2402.13    13.423    9.147
22.570      18.728       1.093        78.039        21.283
Region PNW
  118074.     91587.    209661.   398.43   332.58   731.01    22.004   19.155
41.158      21.413       0.440        39.515        10.777
Region AZNM
  108230.     84575.    192805.   981.70   763.13  1744.83    98.347   77.469  1
75.817      97.680       1.258       101.825        27.770
Region RMPA
   35937.     27063.     63000.   314.21   232.17   546.38    56.763   44.567  1
01.330      78.183       0.457        48.982        13.359
Region NWPE
   56697.     44769.    101466.   572.24   447.47  1019.70   112.212   88.279  2
00.492     106.254       1.122        89.673        24.456

System Total
 2507935.   1997407.   4505342. 22210.50 17831.49 40041.99  1274.430 1036.899 23
11.329    5143.855      35.312      2505.514       683.322
--------------------------------------------------------------------------------
```


(**) Industrial Boiler generation not included in generation totals

---

NOx
SO2 MER CO2 Carbon
Year: 2015, System Totals (Emissions By Plant Type)Generation Trillion
Emission Emission Emission Emission
Emission Emission
---------- (GWh)
(Btu) (1000 Tons) (1000 Tons)
(Tons) (Mil Tonnes)(Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
108008. 85460. 193467. 1054.90 834.31 1889.21 37.501 29.149
66.650 205.554 1.078 176.070 48.019
Total Scrubbed Coal 2
174722. 140295. 315018. 1827.20 1468.65 3295.85 373.438 298.238 6
71.676 416.783 5.667 313.616 85.532
Total Unscrubbed Coal_NOx 3
61311. 46045. 107356. 596.40 447.14 1043.54 42.742 30.428
73.169 520.981 1.896 98.082 26.750
Total Unscrubbed Coal 4
270368. 201842. 472210. 2758.84 2059.56 4818.40 501.510 376.419 8
77.928 2182.267 9.569 456.252 124.432
Total Oil/Gas Steam 5
5461. 32634. 38095. 52.64 324.41 377.04 5.743 40.384
46.128 0.000 0.000 20.010 5.457
Total Oil/Gas Steam_Nox 6
0. 3030. 3030. 0.00 30.13 30.13 0.000 1.322
1.322 0.000 0.000 1.599 0.436
Total Nuclear 7
451086. 340738. 791824. 4753.68 3591.41 8345.09 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
154390. 114990. 269380. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
485033. 380756. 865789. 3630.28 2861.95 6492.23 48.602 40.396
88.998 0.000 0.000 344.545 93.967
Total IGCC 10
2652. 2050. 4702. 19.30 14.91 34.21 0.902 0.697
1.598 0.000 0.010 3.185 0.869
Total Turbine 11
16493. 40079. 56572. 167.03 420.16 587.19 7.497 18.879
26.376 0.000 0.000 31.162 8.499
Total Biomass 12
5659. 4314. 9973. 50.36 38.40 88.76 0.504 0.384
0.888 3.551 0.025 0.000 0.000
Total Geothermal 13
13772. 10799. 24571. 369.68 289.40 659.08 0.000 0.000
0.000 0.000 1.027 0.000 0.000
Total Landfill Gas 14
3785. 2824. 6609. 44.98 33.67 78.65 5.533 4.142
9.675 0.000 0.000 0.000 0.000
Total Wind 15
11161. 6166. 17327. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Fuel Cell 16
39. 13. 51. 0.29 0.09 0.38 0.058 0.019
0.077 0.000 0.000 0.020 0.006
Total Solar 17
580. 312. 892. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
10028. 7909. 17936. 110.04 86.79 196.83 0.000 0.000
0.000 0.000 5.684 0.000 0.000
Total Fossil_Other 19
559. 426. 985. 6.15 4.69 10.84 1.425 1.087
2.512 0.012 0.018 0.000 0.000
Total Pump Storage 20
5136. 5199. 10335. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
12510. 9028. 21538. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
10872. 8414. 19287. 95.35 73.38 168.73 16.478 12.581
29.060 77.949 0.323 15.727 4.289
Total Cgn_Gas 23
83156. 62124. 145280. 663.65 489.99 1153.64 21.439 15.011
36.450 0.000 0.000 61.224 16.697
Total Cgn_Oil 24
1741. 1153. 2894. 13.16 8.75 21.92 0.099 0.100
0.199 0.000 0.000 1.163 0.317
Total Cgn_Other 25
4021. 2965. 6985. 27.70 20.22 47.91 1.181 0.891
2.072 1.004 0.429 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
955. 732. 1687. 6.89 5.29 12.18 0.069 0.053
0.122 0.000 0.000 0.646 0.176
Total Rep.O/G-CC 35
34077. 26139. 60217. 246.04 188.73 434.77 2.460 1.887
4.348 0.000 0.000 23.073 6.293
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
17205. 13820. 31026. 185.63 149.16 334.78 43.135 34.516

77.651 33.144 1.037 32.433 8.845
Total Ret.ExistSCR & Scrub 38
126430. 100414. 226844. 1216.77 966.39 2183.16 29.997 23.825
53.822 194.620 1.295 203.301 55.446
Total Ret.ExistSNCR & Scrub 39
9995. 7938. 17933. 95.41 75.77 171.18 14.066 11.171
25.237 18.342 0.258 15.941 4.348
Total Ret.SCR 40
95701. 74309. 170009. 941.65 730.80 1672.45 26.879 20.732
47.611 801.898 3.058 157.417 42.932
Total Ret.ExistScrub & SCR 41
111008. 88366. 199374. 1103.53 878.34 1981.87 28.476 22.664
51.140 383.262 1.409 185.945 50.712
Total Ret.SNCR 42
2514. 1693. 4207. 27.24 18.45 45.70 5.341 3.563
8.904 23.780 0.052 4.256 1.161
Total Ret.ExistScrub & SNCR 43
942. 743. 1685. 10.28 8.12 18.40 1.955 1.540
3.496 4.048 0.018 1.714 0.467
Total Ret.SCR+Scrb 44
211006. 167605. 378610. 2082.71 1654.32 3737.04 54.936 43.636
98.572 265.026 2.371 348.462 95.035
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
405. 327. 731. 4.41 3.56 7.96 0.883 0.713
1.596 2.102 0.007 0.741 0.202
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
    5155.      4094.      9248.    48.30    38.36    86.67     1.579    1.254
 2.834       9.533       0.080         8.071         2.201
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.      1662.      1662.     0.00    16.19    16.19     0.000    1.220
 1.220       0.000       0.000         0.859         0.234
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

System Total
 2507935.   1997407.   4505342. 22210.50 17831.49 40041.99  1274.430 1036.899 23
11.329    5143.855      35.312      2505.514       683.322
System Total Without Imports
 2495425.   1988379.   4483804. 22210.50 17831.49 40041.99  1274.430 1036.899 23
11.329    5143.855      35.312      2505.514       683.322
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler generation in BBtu, not included in generation totals


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-----------------------------------------------------------------------------
Year: 2020, Region: MECS     (Emissions By Plant)
```

```
-------------------------------------------------

            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
  MECS  TCOLE0411391030308 01              BD1: 5.1 0.39  0.33  0.25    20.   0.
  43.30  3.85  3.85       83.        66.       149.     0.86     0.69     1.55
   0.168    0.134    0.302       0.258       0.000         0.144         0.039
Scrubbed Coal                  2
  MECS  TSXBS0432392020103 01              BD1: 5.1 0.30  0.07  1.72    65.   0.
  40.60  2.94  2.94      270.       214.       484.     2.97     2.36     5.33
   0.446    0.354    0.800       0.192       0.005         0.496         0.135
  MECS  TSXBS0432392020203 01              BD1: 5.1 0.33  0.12  2.94    50.   0.
  40.60  2.94  2.94      208.       165.       372.     2.43     1.93     4.36
   0.401    0.318    0.719       0.265       0.006         0.406         0.111
Unscrubbed Coal_NOx            3
  MECS  TSJBO0412392020202 01              BB2: 4.1 0.24  1.00  3.69    20.   0.
  32.30  1.54  1.54       83.        66.       149.     0.92     0.73     1.66
   0.111    0.088    0.199       0.829       0.003         0.154         0.042
  MECSMITSFSC0441392020101 01              SB1: 4.5 0.04  1.00  4.41  3000.   0.
  27.00  2.51  2.51    12450.      9888.     22339.   114.47    90.91   205.38
   2.060    1.636    3.697     102.692       0.453        19.815         5.404
Unscrubbed Coal                4
  MECS  TCOLU0411392050710 01              BB2: 4.1 0.40  1.00  4.10    22.   0.
  31.80  1.54  1.54       91.        73.       164.     0.95     0.75     1.70
   0.189    0.150    0.339       0.850       0.003         0.158         0.043
  MECS  TCOLU0431152020110 01              BB2: 4.1 0.46  1.00  2.62    45.   0.
  32.00  1.54  1.54      131.        95.       227.     1.37     0.99     2.36
   0.314    0.228    0.542       1.179       0.003         0.220         0.060
  MECS  TCOLU0431392020110 01              BB2: 4.1 0.40  1.00  2.62   253.   0.
  32.00  1.54  1.54     1050.       834.      1884.    10.92     8.67    19.59
   2.184    1.735    3.919       9.796       0.026         1.825         0.498
  MECS  TSASU0441392020110 01              SB1: 4.5 0.26  0.67  4.41  1260.   0.
  22.40  1.54  1.54     5229.      4153.      9382.    51.48    40.88    92.36
   6.615    5.254   11.868      30.802       0.204         8.911         2.430
  MECS  TSBBU0441392020110 01              BB2: 4.1 0.36  1.00  2.62   500.   0.
  32.00  1.54  1.54     2075.      1648.      3723.    18.96    15.06    34.02
   3.385    2.688    6.073      17.011       0.045         3.168         0.864
  MECS  TSEBU0441392020110 01              BB2: 4.1 0.30  1.00  2.62   320.   0.
  32.00  1.54  1.54     1328.      1055.      2383.    13.06    10.38    23.44
   1.960    1.556    3.516      11.720       0.031         2.183         0.595
  MECSMITSGBU0431392020110 01              BB2: 4.1 0.41  1.00  2.62   190.   0.
  32.00  1.54  1.54      789.       626.      1415.     7.92     6.29    14.21
   1.640    1.302    2.942       7.106       0.019         1.323         0.361
  MECSMITSGBU0432391050210 01              BB1: 3.4 0.55  1.00  3.41    27.   0.
  26.40  1.54  1.54       72.        57.       129.     0.90     0.72     1.62
   0.246    0.195    0.441       0.808       0.003         0.150         0.041
  MECSMITSGBU0441392020110 01              BB2: 4.1 0.36  1.00  2.62   945.   0.
  32.00  1.54  1.54     3922.      3115.      7037.    37.66    29.91    67.57
   6.854    5.444   12.298      33.787       0.089         6.293         1.716
  MECS  TSIBU0432392020110 01              BB2: 4.1 0.30  1.00  2.62    53.   0.
  32.00  1.54  1.54      220.       175.       395.     2.41     1.92     4.33
   0.365    0.290    0.656       2.164       0.006         0.403         0.110
  MECS  TSIBU0441392020110 01              BB2: 4.1 0.43  1.00  2.62   103.   0.
  26.40  1.54  1.54      427.       340.       767.     4.39     3.49     7.88
   0.947    0.752    1.698       3.941       0.010         0.734         0.200
```

```
  MECS  TSIBU0442392020110 01                BB2: 4.1 0.30  1.00  2.62   236.   0.
  32.00  1.54  1.54      979.       778.      1757.    11.40     9.06    20.46
   1.711    1.359    3.069      10.230       0.027         1.905         0.520
  MECS  TSKBU0412391020710 01                BB2: 4.1 0.81  1.00  4.10    21.   0.
  32.00  1.54  1.54       87.        69.       156.     1.09     0.87     1.95
   0.443    0.352    0.795       0.977       0.004         0.182         0.050
  MECS  TSKBU0412391050710 01                BB2: 4.1 1.67  1.00  4.10    15.   0.
  26.40  1.54  1.54       62.        49.       112.     0.75     0.59     1.34
   0.625    0.497    1.122       0.670       0.003         0.125         0.034
  MECSMITSLBU0432152020110 01                BB2: 4.1 0.36  1.00  2.62   318.   0.
  29.30  1.54  1.54      848.       674.      1522.     9.18     7.29    16.46
   1.647    1.308    2.955       8.231       0.022         1.533         0.418
  MECSMITSLBU0441152020110 01                BB2: 4.1 0.44  1.00  2.62   156.   0.
  26.40  1.54  1.54      647.       514.      1162.     6.24     4.96    11.20
   1.379    1.096    2.475       5.600       0.015         1.043         0.284
Oil/Gas Steam                    5
  MECS  STHSU0421   000000 00                GAS      0.20  0.00  0.00  1035.   0.
  17.10  2.57  2.57     1053.       570.      1623.    10.10     5.46    15.56
   1.005    0.544    1.548       0.000       0.000         0.826         0.225
Oil/Gas Steam_Nox                6
Nuclear                          7
  MECS  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1110.   0.
 159.80  0.75  0.75     4676.      4072.      8748.    60.17    52.40   112.57
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  MECS  HYDRO00     000000 00                HYDRO    0.00  0.00  0.00   158.   0.
  15.40  0.00  0.00      618.       395.      1013.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  MECS  CC   0413   000000 00                GAS      0.17  0.00  0.00    42.   0.
  19.40  1.03  1.03       28.        22.        50.     0.29     0.22     0.51
   0.025    0.019    0.043       0.000       0.000         0.027         0.007
  MECS  CC   0422   000000 00                GAS      0.02  0.00  0.00  1456.   0.
  13.90  1.03  1.03     4894.      2252.      7146.    36.71    16.89    53.60
   0.367    0.169    0.536       0.000       0.000         2.844         0.776
  MECS  CC   1     (b)                       GAS      0.02  0.00  0.00  2211.  69.
  11.70  1.95  1.95     7627.      5417.     13044.    53.82    38.22    92.04
   0.538    0.382    0.920       0.000       0.000         4.884         1.332
IGCC                            10
Turbine                         11
  MECS  CT   0411   000000 00                GAS      0.11  0.00  0.00     9.   0.
  11.20  1.03  1.03       19.         5.        23.     0.17     0.04     0.21
   0.009    0.002    0.012       0.000       0.000         0.011         0.003
  MECS  CT   0412   000000 00                GAS      0.10  0.00  0.00   152.   0.
   9.00  1.03  1.03       35.        26.        61.     0.37     0.28     0.65
   0.018    0.014    0.032       0.000       0.000         0.034         0.009
  MECS  CT   0422   000000 00                GAS      0.08  0.00  0.00  2392.   0.
   2.80  0.00  1.03        0.        77.        77.     0.00     0.85     0.85
   0.000    0.034    0.034       0.000       0.000         0.045         0.012
  MECS  ACT  1     (b)                       GAS      0.10  0.00  0.00   772.  53.
   7.80  2.94  2.94      543.       392.       935.     4.64     3.35     7.99
   0.232    0.167    0.400       0.000       0.000         0.424         0.116
Biomass                         12
  MECS  BIOMS00  42 000000 00                B1-: 0.6 0.02  0.08  0.57   161.   0.
  44.80  5.36  5.36      698.       539.      1237.     6.44     4.97    11.41
   0.064    0.050    0.114       0.456       0.003         0.000         0.000
Geothermal                      13
Landfill Gas                    14
  MECS  LFGAS00     000000 00                WASTE    0.25  0.00  0.00     5.   0.
  78.60 10.48 10.48       22.        17.        39.     0.31     0.23     0.54
   0.038    0.029    0.066       0.000       0.000         0.000         0.000
Wind                            15
  MECS  WIND 00     000000 00                NONE     0.00  0.00 71.00     1.   0.
  26.40  0.00  0.00        2.         1.         2.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
```

```
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  MECS  OTHER00     000000 00              NONE     0.00  0.00  0.00    18.   0.
 103.60  0.00  0.00       79.        63.       142.     0.87     0.69     1.56
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MECS  OTHER00     000000 00              NONE     0.00  0.00 71.00    15.   0.
 103.60  0.00  0.00       66.        52.       118.     0.73     0.57     1.30
   0.000    0.000    0.000       0.000       0.046         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
  MECS  PUMPS00     000000 00              NONE     0.00  0.00 71.00  1872.   0.
   6.50  0.00  0.00     1066.       839.      1905.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                    21
  MECS  MIIMP00     000000 00              NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00        1.         1.         2.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                        22
  MECS  CGCOU0431392050710 01              BB1: 3.4 0.40  1.00  3.41    55.   0.
  16.70  1.54  1.54      223.       180.       402.     2.31     1.87     4.18
   0.468    0.377    0.845       2.091       0.007         0.389         0.106
Cgn_Gas                         23
  MECS  CGCC 0413   000000 00              GAS      0.18  0.00  0.00    57.   0.
  13.90  1.03  1.03       38.        29.        68.     0.36     0.27     0.63
   0.032    0.024    0.056       0.000       0.000         0.033         0.009
  MECS  CGCC 0421   000000 00              GAS      0.18  0.00  0.00   738.   0.
  18.90  1.03  1.03     3308.      1904.      5211.    22.86    13.16    36.01
   2.057    1.184    3.241       0.000       0.000         1.911         0.521
  MECS  CGCC 0422   000000 00              GAS      0.05  0.00  0.00   724.   0.
  13.90  1.03  1.03     1460.      1120.      2580.    11.27     8.64    19.91
   0.304    0.233    0.537       0.000       0.000         1.056         0.288
  MECS  CGCC 0423   000000 00              GAS      0.18  0.00  0.00   977.   0.
  18.90  1.03  1.03      657.       503.      1160.     6.52     4.99    11.51
   0.586    0.449    1.036       0.000       0.000         0.611         0.167
Cgn_Oil                         24
Cgn_Other                       25
  MECS  CGBIO00  42 000000 00              B1-: 0.6 0.02  0.08  0.57    19.   0.
  44.80  5.36  5.36       82.        64.       146.     0.70     0.54     1.25
   0.007    0.005    0.012       0.050       0.000         0.000         0.000
  MECS  CGOTH00     000000 00              NONE     0.00  0.00 71.00    54.   0.
 103.60  0.00  0.00      234.       181.       415.     0.98     0.76     1.74
   0.000    0.000    0.000       0.000       0.062         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
  MECS  TSBSU0441392020110 01     ML01     BD1: 5.1 0.31  0.06  1.72  1854.  24.
  39.93  2.52  2.52     7695.      6112.     13807.    75.88    60.27   136.15
  11.876    9.432   21.308       4.085       0.117        12.679         3.458
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
  MECS  TSABU0441391020110 01     SCR2     BB2: 4.1 0.06  1.00  2.62   790.   6.
  22.70  2.39  2.39     3279.      2604.      5883.    30.52    24.24    54.76
   0.855    0.679    1.533      27.381       0.072         5.100         1.391
  MECS  TSDBU0441392020110 01     SCR1     BB2: 4.1 0.05  1.00  2.62   609.   9.
```

```
  32.50  2.49  2.49     2527.      2007.      4535.    23.74    18.86    42.60
   0.594    0.471    1.065      21.298       0.056         3.967         1.082
Ret.ExistScrub & SCR          41
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: ECAO     (Emissions By Plant)
--------------------------------------------------
```

	NOx			SO2		MER	CO2		Carbon		
			Generation						Trillion		
	Emission			Emission		Emission	Emission		Emission		
							(lb/MBtu)	(lb/TBtu)	(MW)	$	
/KWyr	VOM Mill/KWh		(GWh)				(Btu)				
	(1000 Tons)			(1000 Tons)		(Tons)	(Mil Tonnes)		(Mil Tonnes)		
Unit						Fuel	NOx	SO2	MERCURY	Cap.	Cap
. FO&M	WINT.	SUMM.	WINTER	SUMMER		Total	WINTER	SUMMER	Total		
WINTER	SUMMER	Total		Total		Total	Total		Total		
Scrubbed Coal_NOx			1								
ECAO	TSXBD0241041020207	01				BG1: 8.0	0.40	0.40	4.66	171.	0.
43.10	3.85	3.85	710.	564.		1273.	7.44	5.91	13.35		
1.492	1.185	2.677		2.637		0.031	1.243		0.339		
ECAO	TSYBA0441192020105	01				BG1: 8.0	0.05	0.25	0.80	500.	0.

```
  41.20  3.91  3.91     2075.      1648.      3723.    21.59    17.14    38.73
   0.518    0.411    0.930       4.841       0.016         3.607         0.984
  ECAOOHTSYBA0441041020105 01              BG1: 8.0 0.06  0.25  0.80  2600.   0.
  43.30  3.91  3.91        0.      8570.      8570.     0.00    81.83    81.83
   0.000    2.373    2.373      10.228       0.033         7.620         2.078
  ECAOOHTSYBA0441041020105 01              BG2:17.4 0.06  0.25  1.74  2600.   0.
  43.30  3.91  3.91    10790.         0.     10790.   103.03     0.00   103.03
   2.988    0.000    2.988      12.878       0.090         9.594         2.617
  ECAO  TSXBA0641202020105 01              BG1: 8.0 0.04  0.25  0.80  1717.   0.
  38.00  3.91  3.91     7126.      5659.     12785.    72.03    57.21   129.23
   1.585    1.259    2.843      16.154       0.052        12.035         3.282
  ECAO  TSXBA0641202020205 01              BG1: 8.0 0.03  0.25  0.80   600.   0.
  41.20  3.91  3.91     2490.      1978.      4468.    24.76    19.67    44.43
   0.421    0.334    0.755       5.554       0.018         4.138         1.128
  ECAO  TSZBA0641051020105 01              BG1: 8.0 0.05  0.25  0.80  1920.   0.
  43.30  3.91  3.91     7968.      6329.     14297.    75.44    59.92   135.36
   1.886    1.498    3.384      16.920       0.054        12.605         3.438
  ECAO  TCOLA0641202020105 01              BG1: 8.0 0.01  0.25  0.80   268.   0.
  23.60  3.91  3.91     1112.       883.      1996.    10.01     7.95    17.96
   0.055    0.044    0.099       2.245       0.007         1.673         0.456
  ECAO  TSXBE0232041020207 01              BG1: 8.0 0.39  0.40  4.66   194.   0.
  43.30  3.85  3.85      805.       536.      1341.     9.82     6.53    16.35
   1.934    1.287    3.221       3.229       0.038         1.522         0.415
  ECAO  TSXBE0242041020207 01              BG1: 8.0 0.38  0.40  4.66   109.   0.
  43.30  3.85  3.85      452.       359.       812.     4.91     3.90     8.82
   0.941    0.747    1.688       1.785       0.021         0.821         0.224
  ECAO  TSVBA0641201010105 01              BG1: 8.0 0.07  0.25  0.80   141.   0.
  43.50  3.91  3.91      585.       465.      1050.     5.86     4.66    10.52
   0.217    0.172    0.389       1.315       0.004         0.979         0.267
  ECAOINTSVBA0441181020105 01              BG1: 8.0 0.05  0.25  0.80   619.   0.
  41.20  3.91  3.91     2569.      2040.      4609.    25.98    20.63    46.61
   0.662    0.526    1.189       5.827       0.019         4.341         1.184
  ECAOINTSVBA0441182020105 01              BG1: 8.0 0.04  0.25  0.80   865.   0.
  41.80  3.91  3.91     3590.      2851.      6441.    35.86    28.48    64.33
   0.789    0.627    1.415       8.042       0.026         5.991         1.634
Scrubbed Coal                    2
  ECAO  TCOLS0231411020703 01              BD2:12.5 0.80  0.18  5.64   176.   0.
  43.00  2.94  2.94      730.       486.      1216.     7.60     5.05    12.65
   3.039    2.022    5.060       1.139       0.036         1.178         0.321
  ECAO  TCOLS0611182020703 01              BG1: 8.0 0.46  0.90  4.66    53.   0.
  43.00  2.94  2.94      220.       175.       395.     2.29     1.82     4.10
   0.526    0.418    0.944       1.847       0.010         0.382         0.104
  ECAOOHTOLBS0432142020304 01              BG1: 8.0 0.34  1.09  0.40    49.   0.
  42.70  2.94  2.94      170.       104.       274.     2.10     1.28     3.38
   0.363    0.221    0.584       1.836       0.001         0.315         0.086
  ECAOINTSVBS0431182020103 01              BG1: 8.0 0.23  0.30  2.73    85.   0.
  43.00  2.94  2.94      353.       280.       633.     3.17     2.52     5.68
   0.360    0.286    0.645       0.853       0.008         0.529         0.144
  ECAO  TSYBS0432192020204 01              BE1: 6.1 0.37  0.42  3.65    63.   0.
  42.70  2.94  2.94      261.       208.       469.     2.92     2.32     5.24
   0.546    0.434    0.980       1.112       0.010         0.488         0.133
  ECAO  TSZBS0431142010103 01              BE1: 6.1 0.46  0.44  2.80    69.   0.
  43.00  2.94  2.94      286.       227.       514.     2.96     2.35     5.32
   0.679    0.539    1.218       1.170       0.007         0.495         0.135
Unscrubbed Coal_NOx              3
  ECAOOHTSEBN0441142020102 01              BA2: 5.2 0.24  1.10  3.31   129.   0.
  32.20  2.45  2.45      448.       356.       805.     4.27     3.39     7.65
   0.514    0.408    0.922       4.210       0.013         0.713         0.194
  ECAOWVTSFBN0641042020102 01              BA2: 5.2 0.31  1.10  3.31   555.   0.
  26.60  2.45  2.45     2303.      1532.      3836.    21.27    14.15    35.43
   3.329    2.215    5.544      19.485       0.059         3.299         0.900
Unscrubbed Coal                  4
  ECAO  TCOLU0211412050710 01              BD2:12.5 0.40  1.50 12.54     8.   0.
  32.00  1.54  1.54       33.        26.        60.     0.35     0.27     0.62
   0.069    0.055    0.124       0.465       0.004         0.058         0.016
```

ECAO TCOLU0231082020110 01 BA2: 5.2 0.46 1.10 3.31 28. 0.
32.00 1.54 1.54 0. 41. 41. 0.00 0.43 0.43
0.000 0.099 0.099 0.236 0.001 0.040 0.011
ECAO TCOLU0231082020110 01 BD2:12.5 0.46 1.50 8.03 28. 0.
32.00 1.54 1.54 75. 0. 75. 0.78 0.00 0.78
0.179 0.000 0.179 0.583 0.003 0.072 0.020
ECAO TCOLU0241082050710 01 BA2: 5.2 0.11 0.28 5.17 204. 0.
11.70 1.54 1.54 847. 672. 1519. 7.62 6.05 13.67
0.419 0.333 0.752 1.880 0.035 1.273 0.347
ECAO TCOLU0411181050710 01 BB2: 4.1 0.52 1.00 4.10 39. 0.
32.00 1.54 1.54 162. 129. 290. 1.68 1.34 3.02
0.433 0.344 0.778 1.510 0.006 0.281 0.077
ECAO TCOLU0411142050710 01 BE2:10.4 0.48 2.20 10.45 111. 0.
32.00 1.54 1.54 461. 366. 827. 4.79 3.81 8.60
1.145 0.909 2.054 9.456 0.045 0.800 0.218
ECAO TCOLU0431142020110 01 BB2: 4.1 0.46 1.00 2.62 106. 0.
32.00 1.54 1.54 283. 225. 507. 2.94 2.34 5.28
0.676 0.537 1.214 2.638 0.007 0.491 0.134
ECAO TCOLU0431182020110 01 BB2: 4.1 0.45 1.00 2.62 179. 0.
32.00 1.54 1.54 743. 494. 1237. 7.73 5.14 12.87
1.723 1.146 2.869 6.433 0.017 1.198 0.327
ECAO TCOLU0431192020110 01 BE1: 6.1 0.46 2.20 3.89 155. 0.
32.00 1.54 1.54 413. 229. 642. 4.30 2.38 6.68
0.989 0.547 1.536 7.348 0.013 0.622 0.170
ECAO TCOLU0431042050710 01 BA2: 5.2 0.48 1.10 5.17 72. 0.
32.00 1.54 1.54 250. 153. 403. 2.60 1.59 4.19
0.622 0.379 1.001 2.304 0.011 0.390 0.106
ECAO TCOLU0611062020210 01 BD1: 5.1 0.46 1.50 4.56 40. 0.
32.00 1.54 1.54 166. 132. 298. 1.73 1.37 3.10
0.397 0.315 0.712 2.323 0.007 0.288 0.079
ECAO TCOLU0631202020110 01 BB2: 4.1 0.46 1.00 2.62 32. 0.
32.00 1.54 1.54 133. 88. 221. 1.38 0.92 2.30
0.318 0.211 0.529 1.150 0.003 0.214 0.058
ECAOVATCOLU0331062020110 01 BA2: 5.2 0.40 1.10 3.31 90. 0.
32.00 1.54 1.54 313. 248. 561. 3.25 2.58 5.84
0.651 0.517 1.168 3.211 0.010 0.544 0.148
ECAO TOLBU0411181020710 01 BE1: 6.1 0.93 2.20 6.08 14. 0.
26.40 1.54 1.54 58. 46. 104. 0.60 0.48 1.08
0.281 0.223 0.504 1.193 0.003 0.101 0.028
ECAO TOLBU0411182020710 01 BE1: 6.1 0.25 2.20 6.08 12. 0.
32.00 1.54 1.54 50. 40. 89. 0.52 0.41 0.93
0.065 0.052 0.117 1.022 0.003 0.087 0.024
ECAO TOLBU0412181020210 01 BB2: 4.1 0.85 1.00 3.69 39. 0.
32.00 1.54 1.54 162. 129. 290. 2.21 1.75 3.96
0.943 0.749 1.692 1.979 0.007 0.369 0.101
ECAO TOLBU0412181020710 01 BF1: 6.8 0.88 3.00 6.83 20. 0.
32.00 1.54 1.54 83. 66. 149. 1.16 0.92 2.08
0.511 0.406 0.917 3.127 0.007 0.194 0.053
ECAO TOLBU0611191020710 01 BG1: 8.0 0.91 5.00 8.04 10. 0.
32.00 1.54 1.54 42. 33. 74. 0.43 0.34 0.77
0.197 0.156 0.353 1.936 0.003 0.072 0.020
ECAO TOLBU0631191040110 01 BE1: 6.1 0.52 2.20 3.95 26. 0.
26.40 1.54 0.00 69. 0. 69. 0.72 0.00 0.72
0.189 0.000 0.189 0.793 0.001 0.067 0.018
ECAO TOLBU0632052020110 01 BD2:12.5 0.47 1.50 8.03 145. 0.
32.00 1.54 1.54 387. 214. 601. 4.41 2.44 6.85
1.032 0.571 1.603 5.138 0.027 0.638 0.174
ECAOMDTOLBU0231082020110 01 BD2:12.5 0.43 1.50 8.03 86. 0.
32.00 1.54 1.54 229. 143. 372. 2.27 1.41 3.69
0.486 0.303 0.789 2.764 0.015 0.343 0.094
ECAOMDTOLBU0231082020110 01 BA2: 5.2 0.43 1.10 3.31 86. 0.
32.00 1.54 1.54 0. 39. 39. 0.00 0.39 0.39
0.000 0.083 0.083 0.214 0.001 0.036 0.010
ECAO TRRBU0432042020110 01 BA2: 5.2 0.30 1.10 3.31 129. 0.
32.00 1.54 1.54 344. 273. 617. 4.15 3.30 7.45

```
   0.623    0.495    1.118       4.099       0.012         0.694         0.189
  ECAO  TSBBU0632061020110 01              BA2: 5.2 0.56  1.10  3.31   141.   0.
  32.00  1.54  1.54      376.       299.       675.     4.46     3.54     8.00
   1.240    0.985    2.225       4.401       0.013         0.745         0.203
  ECAO  TSBBU0632062020110 01              BA2: 5.2 0.41  1.10  3.31    72.   0.
  32.00  1.54  1.54      192.       153.       345.     2.37     1.88     4.25
   0.481    0.382    0.862       2.336       0.007         0.396         0.108
  ECAO  TSBBU0641062020110 01              BA2: 5.2 0.41  1.10  3.31   116.   0.
  32.00  1.54  1.54      481.       320.       802.     4.79     3.19     7.98
   0.988    0.657    1.645       4.391       0.013         0.743         0.203
  ECAOOHTSBBU0431042020110 01              BA2: 5.2 0.37  1.10  3.31   188.   0.
  32.00  1.54  1.54      780.       519.      1299.     7.83     5.21    13.04
   1.433    0.953    2.386       7.170       0.022         1.214         0.331
  ECAOOHTSBBU0441042020110 01              BA2: 5.2 0.42  1.10  3.31   633.   0.
  30.10  1.54  1.54     2627.      1748.      4375.    24.38    16.22    40.60
   5.168    3.438    8.607      22.329       0.067         3.781         1.031
  ECAO  TSESU0441172020110 01              SB1: 4.5 0.28  0.65  4.41   957.   0.
  26.70  1.54  1.54     3972.      3154.      7126.    39.55    31.41    70.96
   5.438    4.319    9.757      22.992       0.157         6.846         1.867
  ECAO  TSFBU0431142020210 01              BB1: 3.4 0.35  1.00  3.07   252.   0.
  32.00  1.54  1.54      876.       696.      1572.     8.95     7.11    16.06
   1.589    1.262    2.851       8.030       0.025         1.496         0.408
  ECAO  TSFBU0432142020110 01              BB2: 4.1 0.35  1.00  2.62    95.   0.
  32.00  1.54  1.54      253.       201.       455.     2.91     2.31     5.22
   0.503    0.400    0.903       2.610       0.007         0.486         0.133
  ECAO  TSHBU0441182020110 01              BB2: 4.1 0.35  1.00  2.62   634.   0.
  28.30  1.54  1.54     2631.      1751.      4382.    27.35    18.20    45.55
   4.760    3.166    7.926      22.776       0.060         4.242         1.157
  ECAO  TSHBU0642182020210 01              BB1: 3.4 0.42  1.00  3.07   108.   0.
  32.00  1.54  1.54      375.       298.       674.     4.21     3.34     7.55
   0.886    0.704    1.590       3.776       0.012         0.703         0.192
  ECAO  TSJBU0441202020410 01              BB2: 4.1 0.40  1.00  0.82   560.   0.
  32.00  1.54  1.54     2324.      1846.      4170.    23.81    18.91    42.72
   4.750    3.773    8.523      21.360       0.018         3.978         1.085
  ECAOINTSKBU0432182020110 01              BB2: 4.1 0.33  1.00  2.62   161.   0.
  32.00  1.54  1.54      560.       445.      1004.     6.45     5.12    11.57
   1.071    0.850    1.921       5.785       0.015         1.078         0.294
  ECAOINTSKBU0432182020210 01              BB1: 3.4 0.39  1.00  3.07    56.   0.
  32.00  1.54  1.54      195.       155.       349.     2.24     1.78     4.02
   0.437    0.347    0.785       2.012       0.006         0.375         0.102
  ECAO  TSLBU0231052020110 01              BD2:12.5 0.35  1.50  8.03    98.   0.
  32.00  1.54  1.54      341.       208.       548.     3.53     2.15     5.69
   0.617    0.376    0.993       4.267       0.023         0.530         0.144
  ECAO  TSLBU0232052020110 01              BD2:12.5 0.33  1.50  8.03    98.   0.
  32.00  1.54  1.54      261.       208.       469.     2.80     2.22     5.03
   0.461    0.366    0.827       3.769       0.020         0.468         0.128
  ECAO  TSLBU0411141020710 01              BF2:11.1 0.86  3.00 11.09    66.   0.
  30.70  1.54  1.54      274.       218.       491.     2.85     2.26     5.11
   1.226    0.973    2.199       7.670       0.028         0.476         0.130
  ECAO  TSLBU0411141050710 01              BF2:11.1 0.83  3.00 11.09    20.   0.
  32.00  1.54  1.54       83.        66.       149.     0.86     0.69     1.55
   0.360    0.286    0.647       2.323       0.009         0.144         0.039
  ECAO  TSLBU0412141020710 01              BG1: 8.0 0.86  5.00  8.04    12.   0.
  32.00  1.54  1.54       50.        40.        89.     0.64     0.51     1.15
   0.275    0.218    0.493       2.868       0.005         0.107         0.029
  ECAO  TSLBU0632182020110 01              BB2: 4.1 0.44  1.00  2.62    71.   0.
  32.00  1.54  1.54      189.       150.       340.     2.32     1.84     4.17
   0.509    0.404    0.912       2.083       0.005         0.388         0.106
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  ECAO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   876.   0.
 183.00  0.91  0.91     4165.      3040.      7204.    43.98    32.10    76.08
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   873.   0.
```

```
 154.00  0.66  0.66     4114.      2988.      7101.    41.79    30.35    72.13
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1017.   0.
 206.80  1.14  1.14     4201.      2315.      6517.    45.04    24.82    69.86
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1238.   0.
 159.60  0.60  0.60     5895.      3864.      9759.    60.50    39.66   100.16
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ECAO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   875.   0.
 183.00  0.91  0.91     3839.      2442.      6281.    41.65    26.49    68.15
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  ECAO  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  1109.   0.
  15.00  0.00  0.00     1806.      1169.      2974.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  ECAO  CC   0222   000000 00              GAS      0.03  0.00  0.00  1491.   0.
  14.00  1.03  1.03     3006.      2306.      5312.    22.83    17.51    40.34
   0.377    0.289    0.666       0.000       0.000         2.141         0.584
  ECAO  CC   0422   000000 00              GAS      0.02  0.00  0.00  4912.   0.
  13.90  1.03  1.03    16511.      7597.     24108.   123.83    56.98   180.81
   1.238    0.570    1.808       0.000       0.000         9.596         2.617
IGCC                            10
  ECAO  IGCC 0441142050710 00              BG1: 8.0 0.10  0.00  0.40   262.   0.
  31.40  1.00  1.00     1135.       877.      2013.     8.26     6.38    14.64
   0.413    0.319    0.732       0.000       0.003         1.364         0.372
Turbine                         11
  ECAO  CT   0222   000000 00              GAS      0.08  0.00  0.00   892.   0.
   2.80  1.03  1.03      619.       462.      1081.     6.77     5.05    11.82
   0.271    0.202    0.473       0.000       0.000         0.627         0.171
  ECAO  CT   0412   000000 00              GAS      0.09  0.00  0.00   165.   0.
   3.50  1.03  1.03      115.        85.       200.     1.24     0.93     2.17
   0.056    0.042    0.097       0.000       0.000         0.115         0.031
  ECAO  CT   0422   000000 00              GAS      0.08  0.00  0.00  9144.   0.
   2.90  1.03  1.03      829.       643.      1473.     9.09     7.05    16.14
   0.377    0.293    0.670       0.000       0.000         0.857         0.234
  ECAO  CT   0612   000000 00              GAS      0.13  0.00  0.00     6.   0.
  11.20  1.03  1.03        4.         3.         7.     0.04     0.03     0.08
   0.003    0.002    0.005       0.000       0.000         0.004         0.001
  ECAO  CT   0622   000000 00              GAS      0.08  0.00  0.00  4215.   0.
   2.80  1.03  1.03      987.       801.      1788.    10.80     8.76    19.56
   0.437    0.355    0.792       0.000       0.000         1.038         0.283
  ECAOVACT   0322   000000 00              GAS      0.08  0.00  0.00   250.   0.
   2.80  1.03  1.03      174.       129.       303.     1.90     1.41     3.31
   0.076    0.057    0.132       0.000       0.000         0.176         0.048
  ECAO  ACT  1     (b)                     GAS      0.10  0.00  0.00  4213.  53.
   7.80  2.94  2.94     2965.      2138.      5103.    25.35    18.28    43.63
   1.268    0.914    2.181       0.000       0.000         2.315         0.631
Biomass                         12
  ECAO  BIOMS00  42 000000 00              B1-: 0.6 0.02  0.08  0.57    84.   0.
  44.80  5.36  5.36      364.       281.       645.     3.36     2.59     5.95
   0.034    0.026    0.060       0.238       0.002         0.000         0.000
Geothermal                      13
Landfill Gas                    14
  ECAO  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    12.   0.
  78.60 10.48 10.48       54.        41.        95.     0.73     0.56     1.29
   0.090    0.069    0.159       0.000       0.000         0.000         0.000
Wind                            15
  ECAO  WIND 00     000000 00              NONE     0.00  0.00 71.00   105.   0.
  26.40  0.00  0.00      164.        92.       256.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  ECAO  OTHER00     000000 00              NONE     0.00  0.00  0.00    90.   0.
```

```
 103.60  0.00  0.00      397.       313.       710.     4.36     3.44     7.81
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                   19
  ECAO  WASTE062    000000 00              WASTE    0.42  0.00  0.00    60.   0.
 103.60  0.00  0.00      268.       205.       473.     2.95     2.25     5.20
   0.614    0.468    1.082       0.000       0.000         0.000         0.000
Pump Storage                   20
  ECAO  PUMPS00     000000 00              NONE     0.00  0.00 71.00   245.   0.
   6.50  0.00  0.00      152.       110.       262.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
  ECAO  CGCOU0231412050710 01            BA2: 5.2 0.40  1.10  5.17   127.   0.
  22.40  1.54  1.54      330.       267.       597.     3.29     2.65     5.94
   0.659    0.532    1.191       3.268       0.015         0.553         0.151
  ECAO  CGCOU0411142050710 01            BB2: 4.1 0.48  1.00  4.10     1.   0.
  22.40  1.54  1.54        4.         3.         7.     0.03     0.03     0.06
   0.008    0.006    0.014       0.030       0.000         0.006         0.002
  ECAO  CGCOS0631041050303 01            BD2:12.5 0.55  0.36  0.38    60.   0.
  23.10  2.94  2.94      243.       196.       439.     1.86     1.50     3.37
   0.514    0.415    0.930       0.606       0.001         0.314         0.086
Cgn_Gas                        23
  ECAO  CGCT 0412   000000 00              GAS      0.10  0.00  0.00    17.   0.
   7.80  1.03  1.03       12.         9.        21.     0.11     0.08     0.20
   0.006    0.004    0.010       0.000       0.000         0.010         0.003
  ECAO  CGCT 0422   000000 00              GAS      0.08  0.00  0.00    78.   0.
   2.80  1.03  1.03       54.        40.        95.     0.59     0.44     1.03
   0.024    0.018    0.041       0.000       0.000         0.055         0.015
  ECAO  CGCT 0612   000000 00              GAS      0.08  0.00  0.00     7.   0.
   2.80  1.03  1.03        5.         4.         8.     0.05     0.04     0.09
   0.002    0.002    0.004       0.000       0.000         0.005         0.001
  ECAO  CGCC 0422   000000 00              GAS      0.02  0.00  0.00   525.   0.
  13.90  1.03  1.03     1708.       812.      2520.    12.81     6.09    18.90
   0.128    0.061    0.189       0.000       0.000         1.003         0.274
Cgn_Oil                        24
Cgn_Other                      25
  ECAO  CGBIO00  42 000000 00            B1-: 0.6 0.02  0.08  0.57     6.   0.
  44.80  5.36  5.36       26.        20.        46.     0.22     0.17     0.39
   0.002    0.002    0.004       0.016       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
  ECAO  TSHBU0441042020310 01     ML01     BF2:11.1 0.40  0.12  0.33   529.  31.
  44.69  2.52  2.52     2194.      1743.      3937.    21.60    17.16    38.76
   4.332    3.440    7.772       2.326       0.006         3.610         0.984
Ret.ExistSCR & Scrub           38
  ECAO  TSDBC0641061020101 01     LO01     BF2:11.1 0.06  0.15  1.11   783.  19.
  34.48  3.85  3.85     3250.      2582.      5832.    30.66    24.35    55.02
   0.966    0.767    1.733       4.126       0.031         5.124         1.397
  ECAOOHTSDBC0441041020101 01     ML02     BF2:11.1 0.05  0.12  1.11  1062.  21.
  41.50  3.42  3.42     4408.      3501.      7910.    39.91    31.70    71.61
   1.038    0.824    1.862       4.297       0.040         6.669         1.819
  ECAOOHTSDBC0441042020101 01     ML02     BF2:11.1 0.04  0.12  1.11   490.  24.
  36.28  3.50  3.50     2032.      1613.      3645.    20.52    16.30    36.82
   0.421    0.334    0.755       2.209       0.020         3.429         0.935
  ECAO  TSEBC0641042020101 01     LO02     BG1: 8.0 0.05  0.25  0.80  4112.  21.
```

33.05 3.84 3.84 17065. 11224. 28288. 159.35 104.81 264.16
3.904 2.568 6.472 33.020 0.106 24.599 6.709
ECAO TSEBC0641042020101 01 LO02 BG2:17.4 0.05 0.25 1.74 4112. 21.
33.05 3.84 3.84 0. 2330. 2330. 0.00 21.75 21.75
0.000 0.533 0.533 2.719 0.019 2.026 0.552
ECAO TSBBC0641062020101 01 ML01 BE1: 6.1 0.04 0.09 0.61 220. 28.
38.58 3.53 3.53 914. 726. 1640. 9.52 7.56 17.08
0.195 0.155 0.350 0.752 0.005 1.591 0.434
ECAO TSBBC0641062020201 01 ML02 BE1: 6.1 0.04 0.09 0.61 294. 30.
38.38 3.52 3.52 0. 968. 968. 0.00 9.92 9.92
0.000 0.208 0.208 0.436 0.003 0.924 0.252
ECAO TSBBC0641062020201 01 ML02 BD1: 5.1 0.04 0.06 0.51 294. 30.
38.38 3.52 3.52 1219. 0. 1219. 12.49 0.00 12.49
0.262 0.000 0.262 0.375 0.003 1.163 0.317
ECAOOHTSBBC0441041020201 01 LD01 BD1: 5.1 0.06 0.15 3.04 617. 18.
32.58 4.48 4.48 2560. 2033. 4593. 25.36 20.14 45.51
0.812 0.645 1.456 3.413 0.069 4.238 1.156
ECAOOHTSCBC0441041020101 01 ML02 BA2: 5.2 0.05 0.04 0.52 490. 23.
32.19 3.49 3.49 2032. 1613. 3645. 20.10 15.97 36.07
0.523 0.415 0.938 0.793 0.009 3.359 0.916
ECAO TSLBC0441181020101 01 LO01 BG1: 8.0 0.05 0.25 0.80 1234. 21.
35.28 3.89 3.89 5119. 4066. 9185. 50.72 40.28 91.00
1.344 1.067 2.411 11.375 0.037 8.474 2.311
ECAO TSLBC0441182020101 01 LO01 BG1: 8.0 0.05 0.25 0.80 617. 22.
31.19 3.91 3.91 2560. 2033. 4593. 25.79 20.48 46.28
0.580 0.461 1.041 5.784 0.019 4.309 1.175
ECAO TSGSC0441201020101 01 ML01 BF1: 6.8 0.09 0.12 0.68 1001. 28.
44.50 3.46 3.46 4152. 3298. 7450. 39.55 31.41 70.96
1.740 1.382 3.122 4.257 0.024 6.608 1.802
ECAOOHTSIBC0441041020101 01 ML01 BF2:11.1 0.06 0.12 1.11 993. 28.
44.70 3.46 3.46 4120. 3272. 7392. 39.00 30.97 69.97
1.228 0.976 2.204 4.198 0.039 6.516 1.777
ECAO TSXBC0641202020201 01 LO01 BG1: 8.0 0.04 0.25 0.80 490. 24.
31.89 3.91 3.91 2032. 1613. 3645. 20.49 16.28 36.77
0.420 0.334 0.754 4.596 0.015 3.424 0.934
Ret.ExistSNCR & Scrub 39
ECAO TSBBN0241041020102 01 ML02 BF2:11.1 0.35 0.12 3.77 490. 23.
35.87 3.42 3.42 2032. 1613. 3645. 19.84 15.76 35.59
3.472 2.757 6.229 2.136 0.067 3.315 0.904
ECAO TSBBN0241042020102 01 ML01 BF2:11.1 0.25 0.12 3.77 336. 32.
45.19 3.44 3.44 1394. 1107. 2500. 13.91 11.05 24.95
1.711 1.359 3.069 1.497 0.047 2.324 0.634
ECAOOHTSDBN0441042020102 01 ML01 BF2:11.1 0.23 0.12 3.77 160. 32.
45.39 3.41 3.41 662. 526. 1188. 6.37 5.06 11.42
0.748 0.594 1.342 0.685 0.022 1.064 0.290
ECAOOHTSGBN0441142020102 01 LO01 BG1: 8.0 0.19 0.25 2.73 584. 21.
34.87 3.76 3.76 2426. 1926. 4352. 22.16 17.60 39.76
2.161 1.716 3.877 4.970 0.054 3.703 1.010
ECAO TSHBN0441041020102 01 LO01 BG1: 8.0 0.38 0.25 2.73 587. 22.
34.97 3.81 3.81 2438. 1936. 4374. 23.64 18.77 42.41
4.432 3.520 7.952 5.301 0.058 3.949 1.077
ECAO TSHBN0441042020102 01 LO01 BG1: 8.0 0.28 0.25 2.73 587. 22.
34.97 3.80 3.80 2438. 1936. 4374. 23.41 18.59 41.99
3.253 2.584 5.837 5.249 0.057 3.911 1.067
ECAO TSHBN0441042020302 01 ML01 BF2:11.1 0.26 0.12 0.33 176. 31.
44.99 3.46 3.46 731. 581. 1312. 7.46 5.92 13.38
0.977 0.776 1.752 0.803 0.002 1.246 0.340
Ret.SCR 40
ECAO TSABU0441201020110 01 SCR2 BB2: 4.1 0.08 1.00 2.62 480. 11.
32.60 2.57 2.57 1992. 1582. 3574. 18.78 14.92 33.69
0.723 0.574 1.297 16.847 0.044 3.138 0.856
ECAOOHTSBBU0441041020110 01 SCR2 BA2: 5.2 0.06 1.10 3.31 134. 12.
32.70 2.60 2.60 556. 442. 998. 5.26 4.18 9.44
0.171 0.136 0.307 5.191 0.016 0.879 0.240
ECAOOHTSCBU0441041020210 01 SCR2 BA2: 5.2 0.05 1.10 4.65 600. 7.

22.80 2.41 2.41 2490. 1978. 4468. 23.25 18.47 41.72
0.593 0.471 1.064 22.944 0.097 3.885 1.059
ECAOWVTSFBU0641042020110 01 SCR1 BA2: 5.2 0.05 1.10 3.31 552. 7.
32.40 2.42 2.42 2291. 1819. 4110. 20.18 16.03 36.20
0.504 0.401 0.905 19.912 0.060 3.371 0.919
ECAO TSHBU0642181020110 01 SCR2 BB2: 4.1 0.05 1.00 2.62 105. 13.
32.70 2.64 2.64 436. 290. 726. 4.83 3.21 8.04
0.121 0.080 0.201 4.022 0.011 0.749 0.204
ECAO TSXBU0641041020110 01 SCR2 BA2: 5.2 0.07 0.66 3.31 290. 12.
32.60 2.59 2.59 1204. 956. 2159. 11.40 9.05 20.45
0.410 0.326 0.736 6.750 0.034 1.905 0.519
Ret.ExistScrub & SCR 41
ECAO TSVBS0641201020103 01 SCR2 BG1: 8.0 0.06 0.25 0.80 633. 9.
43.20 3.88 3.88 2627. 2086. 4714. 26.75 21.25 48.00
0.843 0.669 1.512 6.000 0.019 4.470 1.219
ECAO TSVBS0641202020103 01 SCR1 BG1: 8.0 0.05 0.25 0.80 401. 10.
43.30 3.94 3.94 1664. 1322. 2986. 15.62 12.40 28.02
0.390 0.310 0.701 3.503 0.011 2.609 0.712
ECAOINTSVBS0441181010103 01 SCR2 BG1: 8.0 0.07 0.35 0.80 480. 10.
43.30 3.92 3.92 1992. 1582. 3574. 19.11 15.17 34.28
0.716 0.569 1.286 6.085 0.014 3.192 0.871
ECAOINTSVBS0441182020103 01 SCR1 BG1: 8.0 0.05 0.79 0.80 1664. 8.
42.50 3.85 3.85 6906. 5485. 12391. 71.46 56.76 128.22
1.787 1.419 3.205 50.647 0.052 11.940 3.256
ECAO TSXBS0241042020103 01 SCR1 BF2:11.1 0.05 0.24 1.11 1080. 7.
41.60 3.82 3.82 2187. 3560. 5747. 20.72 33.73 54.45
0.518 0.843 1.361 6.535 0.030 5.071 1.383
ECAO TSXBS0241042020103 01 SCR1 BE2:10.4 0.05 0.18 1.04 1080. 7.
41.60 3.82 3.82 2295. 0. 2295. 21.74 0.00 21.74
0.544 0.000 0.544 1.913 0.011 2.025 0.552
ECAO TSXBS0241042020703 01 SCR1 BE2:10.4 0.05 0.18 1.04 1566. 6.
43.10 3.79 3.79 6499. 5162. 11661. 63.94 50.78 114.72
1.598 1.270 2.868 10.222 0.060 10.683 2.914
ECAO TSXBS0242412020703 01 SCR1 BE3:18.4 0.05 0.18 1.84 134. 12.
43.70 4.00 4.00 556. 442. 998. 6.32 5.02 11.34
0.158 0.126 0.284 0.998 0.010 1.056 0.288
ECAO TSXBS0441142020103 01 SCR1 BE2:10.4 0.05 0.26 1.04 750. 8.
42.20 3.86 3.86 3113. 2472. 5585. 31.77 25.23 57.00
0.794 0.631 1.425 7.524 0.030 5.308 1.448
ECAO TSXBS0641201020103 01 SCR2 BG1: 8.0 0.07 0.56 0.80 469. 10.
43.30 3.92 3.92 1946. 1546. 3492. 20.39 16.19 36.58
0.683 0.542 1.225 10.334 0.015 3.406 0.929
ECAO TSXBS0641042020103 01 SCR1 BE2:10.4 0.05 0.26 1.04 1228. 7.
41.00 3.81 3.81 5096. 4048. 9144. 49.80 39.55 89.36
1.245 0.989 2.234 11.795 0.047 8.321 2.269
ECAO TSXBS0641202020103 01 SCR1 BG1: 8.0 0.05 0.55 0.80 993. 9.
42.30 3.91 3.91 4121. 3273. 7394. 42.35 33.63 75.98
1.059 0.841 1.900 20.895 0.031 7.076 1.930
ECAO TSXBS0642201020103 01 SCR2 BG1: 8.0 0.06 0.50 0.80 155. 11.
43.60 3.98 3.98 643. 511. 1154. 7.14 5.67 12.80
0.218 0.173 0.390 3.201 0.005 1.192 0.325
ECAO TSYBS0441192020103 01 SCR1 BG1: 8.0 0.05 0.70 0.80 1722. 8.
41.00 3.85 3.85 4066. 5676. 9742. 39.76 55.51 95.27
0.994 1.388 2.382 33.345 0.038 8.872 2.420
ECAO TSYBS0441192020103 01 SCR1 BE1: 6.1 0.05 0.31 0.61 1722. 8.
41.00 3.85 3.85 3080. 0. 3080. 30.12 0.00 30.12
0.753 0.000 0.753 4.639 0.009 2.805 0.765
ECAOOHTSYBS0441042020103 01 SCR1 BG1: 8.0 0.05 0.45 0.80 1300. 6.
23.40 3.78 3.78 5395. 4285. 9680. 51.37 40.80 92.18
1.284 1.020 2.304 20.509 0.037 8.584 2.341
ECAOOHTSBBS0441041020304 01 SCR2 BD2:12.5 0.06 0.15 0.63 132. 12.
43.70 4.00 4.00 548. 435. 983. 5.07 4.03 9.10
0.165 0.131 0.296 0.682 0.003 0.847 0.231
Ret.SNCR 42
ECAO TCOLU0431041020110 01 HNO1 BA2: 5.2 0.53 1.10 3.31 123. 4.

32.60 2.46 2.46 328. 261. 589. 3.41 2.71 6.12
0.903 0.717 1.619 3.368 0.010 0.570 0.156
ECAO TCOLU0431141020110 01 HNO1 BB2: 4.1 0.52 1.00 2.62 94. 4.
32.50 2.46 2.46 251. 199. 450. 2.61 2.07 4.68
0.678 0.539 1.217 2.340 0.006 0.436 0.119
ECAO TCOLU0631051020110 01 HNO1 BD2:12.5 0.52 1.50 8.03 46. 4.
32.50 2.46 2.46 123. 97. 220. 1.28 1.01 2.29
0.332 0.264 0.595 1.717 0.009 0.213 0.058
ECAOINTSCBU0431181020110 01 HNO1 BB2: 4.1 0.40 1.00 2.62 255. 3.
32.30 2.46 2.46 1058. 704. 1762. 11.02 7.33 18.36
2.227 1.482 3.708 9.179 0.024 1.710 0.466
ECAOINTSCBU0432181020110 01 HNO1 BB2: 4.1 0.36 1.00 2.62 95. 2.
32.30 2.46 2.46 394. 262. 657. 4.24 2.82 7.06
0.758 0.505 1.263 3.528 0.009 0.657 0.179
Ret.ExistScrub & SNCR 43
ECAO TCOLS0631041050303 01 HNO1 BD2:12.5 0.36 0.36 0.38 84. 3.
23.40 3.86 3.86 349. 277. 625. 3.63 2.88 6.51
0.651 0.517 1.168 1.171 0.001 0.606 0.165
ECAOINTSVBS0432181020103 01 HNO1 BG1: 8.0 0.32 0.30 2.73 90. 3.
43.30 3.86 3.86 374. 297. 670. 4.38 3.48 7.85
0.711 0.565 1.276 1.178 0.011 0.731 0.199
Ret.SCR+Scrb 44
ECAOOHTOLBU0441142020110 01 RO01 BG1: 8.0 0.05 0.25 0.80 238. 46.
44.89 3.90 3.90 987. 784. 1771. 9.75 7.75 17.50
0.244 0.194 0.438 2.188 0.007 1.630 0.445
ECAOOHTSABU0441051010110 01 SO01 BG1: 8.0 0.06 0.25 0.80 401. 50.
45.89 3.90 3.90 1666. 1323. 2989. 15.97 12.68 28.65
0.495 0.393 0.888 3.581 0.012 2.668 0.728
ECAOOHTSABU0441051020110 01 SO01 BG1: 8.0 0.06 0.25 0.80 372. 52.
46.29 3.91 3.91 1544. 1226. 2770. 14.86 11.80 26.66
0.468 0.372 0.840 3.332 0.011 2.482 0.677
ECAO TSBBU0241042020110 01 RO01 BG1: 8.0 0.05 0.25 0.80 550. 30.
35.37 3.82 3.82 2283. 1814. 4097. 22.93 18.21 41.14
0.573 0.455 1.029 5.143 0.017 3.831 1.045
ECAOINTSCBU0441182020110 01 RL02 BF1: 6.8 0.05 0.12 0.68 1265. 33.
36.67 3.45 3.45 5249. 4169. 9419. 53.75 42.69 96.44
1.344 1.067 2.411 5.786 0.033 8.981 2.449
ECAO TSDBU0641062020110 01 RL01 BD1: 5.1 0.05 0.06 0.51 255. 34.
43.39 3.47 3.47 1056. 839. 1895. 10.11 8.03 18.14
0.253 0.201 0.454 0.544 0.005 1.689 0.461
ECAOWVTSDBU0641051010110 01 SL01 BF2:11.1 0.06 0.12 1.11 611. 40.
44.79 3.50 3.50 2538. 2015. 4553. 24.41 19.39 43.80
0.769 0.611 1.380 2.628 0.024 4.078 1.112
ECAOOHTSEBU0441142020110 01 RL01 BF2:11.1 0.05 0.12 1.11 638. 44.
45.89 3.57 3.57 2649. 2104. 4753. 26.66 21.18 47.84
0.667 0.529 1.196 2.870 0.027 4.455 1.215
ECAO TSFBU0441142020110 01 RO01 BG1: 8.0 0.05 0.25 0.80 583. 28.
35.07 3.73 3.73 2422. 1923. 4345. 22.47 17.85 40.32
0.562 0.446 1.008 5.039 0.016 3.754 1.024
ECAO TSFSU0441202020110 01 RO02 BG1: 8.0 0.05 0.25 0.80 2545. 26.
26.72 3.77 3.77 10564. 8390. 18954. 105.62 83.88 189.50
2.640 2.097 4.738 23.688 0.076 17.647 4.813
ECAOOHTSGBU0441141010110 01 SL01 BF2:11.1 0.05 0.12 1.11 225. 54.
48.29 3.66 3.66 934. 742. 1677. 9.89 7.86 17.75
0.267 0.212 0.479 1.065 0.010 1.653 0.451
ECAOOHTSGBU0441142020110 01 RL02 BF2:11.1 0.05 0.12 1.11 925. 32.
37.29 3.41 3.41 3840. 3049. 6889. 37.57 29.84 67.42
0.939 0.746 1.685 4.045 0.037 6.278 1.712
ECAO TSGSU0441201020210 01 SL01 BF1: 6.8 0.09 0.12 0.68 191. 40.
44.89 3.51 3.51 792. 629. 1422. 7.70 6.12 13.81
0.362 0.287 0.649 0.829 0.005 1.286 0.351
ECAO TSHBU0441041020110 01 SO01 BG1: 8.0 0.05 0.25 0.80 573. 29.
35.17 3.76 3.76 2377. 1888. 4265. 22.54 17.90 40.45
0.609 0.483 1.092 5.056 0.016 3.766 1.027
ECAO TSHBU0641042020110 01 RL02 BF2:11.1 0.05 0.12 1.11 431. 32.

42.09 3.36 3.36 1788. 1420. 3208. 16.29 12.94 29.22
0.407 0.323 0.731 1.753 0.016 2.721 0.742
ECAO TSKBU0441042020110 01 RL02 BF2:11.1 0.05 0.12 1.11 638. 37.
39.91 3.46 3.46 2649. 2104. 4753. 26.14 20.76 46.89
0.653 0.519 1.172 2.814 0.026 4.367 1.191
ECAO TSLBU0241052020110 01 RL01 BF2:11.1 0.05 0.12 1.11 134. 48.
47.09 3.64 3.64 557. 442. 999. 5.91 4.69 10.60
0.148 0.117 0.265 0.636 0.006 0.987 0.269
ECAO TOLBU0641052020110 01 ML01SCR1 BF2:11.1 0.05 0.12 1.11 134. 48.
47.09 3.64 3.64 557. 442. 999. 5.88 4.67 10.56
0.147 0.117 0.264 0.633 0.006 0.983 0.268
ECAO TSBBU0241041020110 01 SCR2ML02 BF2:11.1 0.06 0.12 1.11 979. 30.
35.97 3.37 3.37 4063. 3227. 7290. 38.13 30.28 68.41
1.087 0.863 1.950 4.105 0.038 6.371 1.737
ECAOINTSBBU0441182020110 01 ML01SCR1 BF1: 6.8 0.05 0.12 0.68 370. 50.
41.87 3.61 3.61 1536. 1220. 2756. 15.43 12.25 27.68
0.386 0.306 0.692 1.661 0.009 2.578 0.703
ECAOVATSDBU0341061020110 01 SCR2ML01 BD1: 5.1 0.07 0.06 0.51 906. 36.
43.90 3.45 3.45 3758. 2985. 6743. 34.70 27.56 62.25
1.284 1.020 2.303 1.868 0.016 5.797 1.581
ECAOWVTSDBU0641051010110 01 SCR2ML01 BF2:11.1 0.06 0.12 1.11 153. 40.
44.90 3.50 3.50 636. 505. 1140. 6.11 4.86 10.97
0.193 0.153 0.346 0.658 0.006 1.021 0.279
ECAOOHTSEBU0442142020110 01 ML01SCR1 BF2:11.1 0.05 0.12 1.11 153. 45.
46.29 3.64 3.64 634. 503. 1137. 6.88 5.47 12.35
0.172 0.137 0.309 0.741 0.007 1.150 0.314
ECAO TSESU0441171010110 01 SCR2LO01 BG1: 8.0 0.07 0.25 0.80 422. 34.
36.37 3.85 3.85 1751. 1391. 3142. 17.58 13.97 31.55
0.580 0.461 1.041 3.944 0.013 2.938 0.801
ECAOINTSFBU0441201010110 01 SCR2ML02 BF1: 6.8 0.09 0.12 0.68 490. 30.
41.59 3.32 3.32 2032. 1613. 3645. 17.78 14.12 31.90
0.764 0.607 1.372 1.914 0.011 2.970 0.810
ECAOKYTSFBU0641201020210 01 SCR2ML02 BB2: 4.1 0.05 0.04 0.41 962. 32.
32.09 3.45 3.45 3994. 3172. 7166. 41.70 33.12 74.81
1.105 0.878 1.983 1.496 0.015 6.967 1.900
ECAOKYTSFBU0641202020210 01 SCR1ML02 BB2: 4.1 0.05 0.04 0.41 498. 31.
36.07 3.44 3.44 2068. 1643. 3711. 21.36 16.96 38.32
0.534 0.424 0.958 0.766 0.008 3.568 0.973
ECAOWVTSFBU0641041020110 01 SCR2LD01 BD1: 5.1 0.05 0.15 3.24 1566. 23.
31.57 4.28 4.28 6501. 5163. 11664. 61.51 48.85 110.37
1.599 1.270 2.870 8.277 0.179 10.278 2.803
ECAO TSHBU0441042020110 01 ML02SCR1 BF2:11.1 0.05 0.12 1.11 2252. 32.
37.70 3.39 3.39 9345. 7422. 16767. 89.26 70.90 160.16
2.232 1.772 4.004 9.610 0.089 14.914 4.068
ECAO TSHBU0641041020110 01 SCR2ML01 BF2:11.1 0.07 0.12 1.11 666. 43.
45.60 3.51 3.51 2763. 2194. 4957. 26.26 20.86 47.12
0.946 0.751 1.696 2.827 0.026 4.388 1.197
ECAO TSHBU0641182020110 01 SCR1ML01 BF1: 6.8 0.05 0.12 0.68 982. 40.
40.20 3.57 3.57 4075. 3237. 7312. 42.77 33.97 76.74
1.069 0.849 1.918 4.604 0.026 7.146 1.949
ECAO TSISU0441171010110 01 SCR2LO01 BG1: 8.0 0.06 0.25 0.80 459. 33.
36.07 3.84 3.84 1906. 1513. 3419. 19.21 15.26 34.47
0.567 0.450 1.017 4.309 0.014 3.210 0.876
ECAO TSJBU0441051020110 01 SCR2LO01 BG1: 8.0 0.06 0.25 0.80 563. 29.
35.27 3.74 3.74 2336. 1856. 4192. 21.64 17.19 38.83
0.682 0.541 1.223 4.854 0.016 3.616 0.986

Ret.SNCR+Scrub	45
Ret.Gas Reburn	46
Ret.ExistScrub+GasR	47
Ret.GasReburn+Scrub	48
Ret.ACI	49
Ret.ExistScrub&ACI	50
Ret.ExistSCR&ACI	51
Ret.ExistSNCR&ACI	52
Ret.ACI & SCR	53

```
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: ERCT     (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  ERCTTXTSXLS2342302020103 02              LF2: 9.8 0.30  0.77  5.48  4341.   0.
  41.00  2.94  2.94     7720.     10842.     18562.    85.91   120.63   206.54
  13.058   18.336   31.394      79.962       0.566        20.180         5.504
  ERCTTXTSXLS2342302030303 02              LF2: 9.8 0.15  0.60  4.21   300.   0.
  28.10  2.94  2.94     1245.       989.      2234.    13.39    10.63    24.02
   0.984    0.781    1.765       7.209       0.051         2.347         0.640
  ERCTTXTSXSS2341292020303 01              SD2: 6.7 0.30  0.11  1.81   530.   0.
  23.10  2.94  2.94     2200.      1747.      3947.    20.97    16.65    37.62
   3.145    2.498    5.643       2.133       0.034         3.629         0.990
  ERCTTXTSXSS3541292020103 01              SB2: 6.5 0.46  0.09  5.44   676.   0.
  40.60  2.94  2.94     2805.      2228.      5034.    27.32    21.70    49.01
   6.242    4.958   11.199       2.157       0.133         4.729         1.290
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  ERCTTXTSABU2341292020210 01              BB1: 3.4 0.30  0.73  3.07   632.   0.
  22.40  1.54  1.54     2623.      2083.      4706.    25.01    19.86    44.87
   3.751    2.979    6.730      16.489       0.069         4.178         1.140
  ERCTTXTSBSU2341292020110 01              SB2: 6.5 0.32  0.69  6.29  1160.   0.
```

```
  22.40  1.54  1.54     3519.      2795.      6315.    34.31    27.25    61.57
   5.439    4.320    9.758      21.302       0.193         5.940         1.620
Oil/Gas Steam                   5
  ERCTTXSTGAU2011   000000 00              GAS      0.26  0.00  0.00    96.   0.
  21.40  0.00  2.57        0.        81.        81.     0.00     0.85     0.85
   0.000    0.113    0.113       0.000       0.000         0.045         0.012
  ERCTTXSTGAU2211   000000 00              GAS      0.26  0.00  0.00    12.   0.
  21.40  0.00  2.57        0.        13.        13.     0.00     0.13     0.13
   0.000    0.018    0.018       0.000       0.000         0.007         0.002
  ERCTTXSTGAU2511   000000 00              GAS      0.26  0.00  0.00   144.   0.
  21.40  0.00  2.57        0.       152.       152.     0.00     1.61     1.61
   0.000    0.212    0.212       0.000       0.000         0.085         0.023
  ERCTTXSTGAU2521   000000 00              GAS      0.26  0.00  0.00   205.   0.
  21.40  0.00  2.57        0.       216.       216.     0.00     2.29     2.29
   0.000    0.302    0.302       0.000       0.000         0.122         0.033
  ERCTTXSTGAU2711   000000 00              GAS      0.26  0.00  0.00    11.   0.
  10.70  0.00  2.57        0.        12.        12.     0.00     0.12     0.12
   0.000    0.016    0.016       0.000       0.000         0.007         0.002
  ERCTTXSTHSU2021   000000 00              GAS      0.19  0.00  0.00  1078.   0.
  20.60  0.00  2.57        0.       941.       941.     0.00     9.36     9.36
   0.000    0.908    0.908       0.000       0.000         0.497         0.136
  ERCTTXSTHSU2221   000000 00              GAS      0.27  0.00  0.00  3693.   0.
  20.00  0.00  2.57        0.      3893.      3893.     0.00    38.11    38.11
   0.000    5.183    5.183       0.000       0.000         2.022         0.552
  ERCTTXSTHSU2321   000000 00              GAS      0.14  0.00  0.00   356.   0.
  19.70  0.00  2.57        0.       375.       375.     0.00     3.72     3.72
   0.000    0.260    0.260       0.000       0.000         0.197         0.054
  ERCTTXSTHSU2521   000000 00              GAS      0.48  0.00  0.00  2276.   0.
  20.40  0.00  2.57        0.      2399.      2399.     0.00    23.52    23.52
   0.000    5.668    5.668       0.000       0.000         1.248         0.340
  ERCTTXSTLSU2011   000000 00              GAS      0.44  0.00  0.00    16.   0.
  21.40  0.00  2.57        0.        13.        13.     0.00     0.13     0.13
   0.000    0.030    0.030       0.000       0.000         0.007         0.002
  ERCTTXSTLSU2021   000000 00              GAS      0.27  0.00  0.00   285.   0.
  20.70  0.00  2.57        0.       225.       225.     0.00     2.31     2.31
   0.000    0.315    0.315       0.000       0.000         0.123         0.033
  ERCTTXSTLSU2221   000000 00              GAS      0.22  0.00  0.00  4296.   0.
  20.60  0.00  2.57        0.      3970.      3970.     0.00    40.19    40.19
   0.000    4.421    4.421       0.000       0.000         2.133         0.582
  ERCTTXSTLSU2321   000000 00              GAS      0.12  0.00  0.00   405.   0.
  19.70  0.00  2.57        0.       427.       427.     0.00     4.27     4.27
   0.000    0.256    0.256       0.000       0.000         0.227         0.062
  ERCTTXSTLSU2511   000000 00              GAS      0.54  0.00  0.00    11.   0.
  21.40  0.00  2.57        0.        12.        12.     0.00     0.12     0.12
   0.000    0.033    0.033       0.000       0.000         0.007         0.002
  ERCTTXSTLSU2521   000000 00              GAS      0.29  0.00  0.00   726.   0.
  20.20  0.00  2.57        0.       765.       765.     0.00     7.99     7.99
   0.000    1.167    1.167       0.000       0.000         0.424         0.116
  ERCTTXSTLSU3521   000000 00              GAS      0.11  0.00  0.00   204.   0.
  19.70  0.00  2.57        0.       215.       215.     0.00     2.20     2.20
   0.000    0.121    0.121       0.000       0.000         0.117         0.032
Oil/Gas Steam_Nox               6
  ERCTTXSTHSC1821   000000 00              GAS      0.03  0.00  0.00   739.   0.
  20.90  0.00  2.67        0.       317.       317.     0.00     3.10     3.10
   0.000    0.050    0.050       0.000       0.000         0.164         0.045
  ERCTTXSTHSO2521   000000 00              GAS      0.16  0.00  0.00   116.   0.
  20.00  0.00  3.02        0.       122.       122.     0.00     1.18     1.18
   0.000    0.095    0.095       0.000       0.000         0.063         0.017
  ERCTTXSTHSO3521   000000 00              GAS      0.15  0.00  0.00   200.   0.
  20.00  0.00  3.02        0.       211.       211.     0.00     2.05     2.05
   0.000    0.154    0.154       0.000       0.000         0.109         0.030
  ERCTTXSTLSO2021   000000 00              GAS      0.14  0.00  0.00   940.   0.
  21.60  0.00  3.02        0.       991.       991.     0.00     9.93     9.93
   0.000    0.675    0.675       0.000       0.000         0.527         0.144
Nuclear                         7
```

```
  ERCT  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1196.   0.
  81.80  0.52  0.52     5713.      4027.      9741.    60.68    42.77   103.46
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
  ERCT  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1329.   0.
 142.40  0.48  0.48     5786.      4875.     10661.    58.71    49.47   108.19
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
  ERCT  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1241.   0.
 131.80  0.52  0.52     5479.      4265.      9745.    57.92    45.09   103.01
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
  ERCT  NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1314.   0.
 142.40  0.48  0.48     5755.      4603.     10358.    60.38    48.30   108.68
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
Hydro                            8
  ERCT  HYDRO00     000000 00                HYDRO    0.00  0.00  0.00   356.   0.
  15.50  0.00  0.00      431.       365.       796.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
Comb.Cycle Gas                   9
  ERCTTXCC   1922   000000 00                GAS      0.02  0.00  0.00  1108.   0.
  13.90  1.03  1.03     2234.      2857.      5091.    16.76    21.43    38.18
   0.168    0.214    0.382       0.000       0.000          2.026          0.553
  ERCTTXCC   1923   000000 00                GAS      0.16  0.00  0.00   463.   0.
  19.90  0.00  1.03        0.        79.        79.     0.00     0.82     0.82
   0.000    0.065    0.065       0.000       0.000          0.044          0.012
  ERCTTXCC   1924   000000 00                GAS      0.16  0.00  0.00   162.   0.
  19.90  0.00  1.03        0.        28.        28.     0.00     0.35     0.35
   0.000    0.028    0.028       0.000       0.000          0.019          0.005
  ERCTTXCC   2313   000000 00                GAS      0.13  0.00  0.00     7.   0.
  19.90  1.03  1.03        2.         4.         5.     0.02     0.04     0.06
   0.001    0.003    0.004       0.000       0.000          0.003          0.001
  ERCTTXCC   2322   000000 00                GAS      0.02  0.00  0.00  4495.   0.
  13.90  1.03  1.03    15235.     15453.     30688.   114.26   115.90   230.16
   1.143    1.159    2.302       0.000       0.000         12.215          3.331
  ERCTTXCC   2513   000000 00                GAS      0.16  0.00  0.00    22.   0.
  19.90  1.03  1.03        5.        11.        16.     0.05     0.11     0.15
   0.004    0.009    0.012       0.000       0.000          0.008          0.002
  ERCTTXCC   2514   000000 00                GAS      0.16  0.00  0.00     3.   0.
  19.90  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
  ERCTTXCC   2523   000000 00                GAS      0.14  0.00  0.00   103.   0.
  19.90  1.03  1.03       23.        53.        76.     0.22     0.50     0.72
   0.015    0.035    0.050       0.000       0.000          0.038          0.010
  ERCTTXCC   2524   000000 00                GAS      0.10  0.00  0.00    36.   0.
  19.90  0.00  1.03        0.         6.         6.     0.00     0.07     0.07
   0.000    0.004    0.004       0.000       0.000          0.004          0.001
  ERCTTXCC   2722   000000 00                GAS      0.02  0.00  0.00  8847.   0.
  13.90  1.03  1.03    26438.     23920.     50358.   198.28   179.40   377.68
   1.983    1.794    3.777       0.000       0.000         20.044          5.467
  ERCTTXCC   3522   000000 00                GAS      0.02  0.00  0.00  2623.   0.
  13.90  1.03  1.03    11756.      9017.     20773.    88.17    67.63   155.80
   0.882    0.676    1.558       0.000       0.000          8.268          2.255
  ERCTTXCC   3523   000000 00                GAS      0.13  0.00  0.00   258.   0.
  18.90  1.03  1.03       58.       133.       191.     0.64     1.47     2.12
   0.042    0.097    0.139       0.000       0.000          0.112          0.031
  ERCTTXCC   19    (b)                      GAS      0.02  0.00  0.00  7179.  68.
  11.70  1.95  1.95    33019.     23830.     56849.   232.98   168.14   401.13
   2.330    1.681    4.011       0.000       0.000         21.288          5.806
IGCC                            10
Turbine                         11
  ERCTTXCT   1814   000000 00                GAS      0.10  0.00  0.00   153.   0.
  11.20  0.00  1.03        0.        26.        26.     0.00     0.38     0.38
   0.000    0.019    0.019       0.000       0.000          0.020          0.005
  ERCTTXCT   1922   000000 00                GAS      0.08  0.00  0.00   980.   0.
   2.80  0.00  1.03        0.       169.       169.     0.00     1.84     1.84
   0.000    0.074    0.074       0.000       0.000          0.098          0.027
  ERCTTXCT   1923   000000 00                GAS      0.10  0.00  0.00   348.   0.
```

```
  11.20  0.00  1.03        0.        60.        60.     0.00     0.80     0.80
   0.000    0.041    0.041       0.000       0.000         0.043         0.012
  ERCTTXCT   1924   000000 00               GAS      0.10  0.00  0.00   354.   0.
  11.20  0.00  1.03        0.        61.        61.     0.00     0.91     0.91
   0.000    0.046    0.046       0.000       0.000         0.048         0.013
  ERCTTXCT   2114   000000 00               GAS      0.10  0.00  0.00     5.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  ERCTTXCT   2122   000000 00               GAS      0.08  0.00  0.00    85.   0.
   2.80  1.03  1.03       20.        44.        64.     0.21     0.48     0.70
   0.009    0.019    0.028       0.000       0.000         0.037         0.010
  ERCTTXCT   2214   000000 00               GAS      0.10  0.00  0.00    56.   0.
  11.20  0.00  1.03        0.        10.        10.     0.00     0.14     0.14
   0.000    0.007    0.007       0.000       0.000         0.007         0.002
  ERCTTXCT   2312   000000 00               GAS      0.10  0.00  0.00     7.   0.
   7.80  1.03  1.03        2.         4.         5.     0.02     0.04     0.05
   0.001    0.002    0.003       0.000       0.000         0.003         0.001
  ERCTTXCT   2313   000000 00               GAS      0.10  0.00  0.00    21.   0.
  11.20  0.00  1.03        0.         4.         4.     0.00     0.05     0.05
   0.000    0.002    0.002       0.000       0.000         0.003         0.001
  ERCTTXCT   2314   000000 00               GAS      0.10  0.00  0.00     4.   0.
  11.20  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  ERCTTXCT   2322   000000 00               GAS      0.09  0.00  0.00   460.   0.
   2.80  1.03  1.03      106.        79.       186.     1.20     0.90     2.10
   0.055    0.041    0.097       0.000       0.000         0.111         0.030
  ERCTTXCT   2323   000000 00               GAS      0.10  0.00  0.00   200.   0.
   7.80  0.00  1.03        0.        34.        34.     0.00     0.44     0.44
   0.000    0.022    0.022       0.000       0.000         0.023         0.006
  ERCTTXCT   2414   000000 00               GAS      0.10  0.00  0.00     7.   0.
  11.20  0.00  1.03        0.         1.         1.     0.00     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  ERCTTXCT   2512   000000 00               GAS      0.10  0.00  0.00     8.   0.
   8.80  1.03  1.03        2.         4.         6.     0.02     0.04     0.06
   0.001    0.002    0.003       0.000       0.000         0.003         0.001
  ERCTTXCT   2514   000000 00               GAS      0.10  0.00  0.00    27.   0.
  11.20  0.00  1.03        0.         5.         5.     0.00     0.07     0.07
   0.000    0.003    0.003       0.000       0.000         0.004         0.001
  ERCTTXCT   2722   000000 00               GAS      0.08  0.00  0.00   275.   0.
   2.80  1.03  1.03       64.       142.       206.     0.69     1.56     2.25
   0.028    0.062    0.090       0.000       0.000         0.119         0.033
  ERCTTXCT   3514   000000 00               GAS      0.10  0.00  0.00     1.   0.
   7.80  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCTTXCT   3522   000000 00               GAS      0.10  0.00  0.00   260.   0.
   7.80  1.03  1.03       60.        45.       105.     0.69     0.51     1.21
   0.035    0.026    0.061       0.000       0.000         0.064         0.017
  ERCTTXCT   3523   000000 00               GAS      0.10  0.00  0.00   502.   0.
   8.10  0.00  1.03        0.        86.        86.     0.00     1.06     1.06
   0.000    0.054    0.054       0.000       0.000         0.056         0.015
  ERCTTXCT   3524   000000 00               GAS      0.10  0.00  0.00   293.   0.
   3.30  0.00  1.03        0.        50.        50.     0.00     0.72     0.72
   0.000    0.037    0.037       0.000       0.000         0.038         0.010
  ERCTTXACT  19    (b)                      GAS      0.10  0.00  0.00 13287.  52.
   7.80  2.94  2.94     5017.     18900.     23917.    42.89   161.60   204.49
   2.145    8.080   10.224       0.000       0.000        10.852         2.960
Biomass                        12
Geothermal                     13
Landfill Gas                   14
  ERCT  LFGAS00     000000 00               WASTE    0.25  0.00  0.00    67.   0.
  78.60 10.48 10.48      300.       229.       528.     4.09     3.12     7.21
   0.503    0.384    0.887       0.000       0.000         0.000         0.000
  ERCTTXLG   19    (a)                      WASTE    0.25  0.00  0.00    92. 174.
  78.60 10.48 10.48      396.       286.       682.     3.96     2.86     6.82
   0.487    0.351    0.838       0.000       0.000         0.000         0.000
```

```
Wind                            15
  ERCT  WIND 00     000000 00              NONE     0.00  0.00 71.00   703.   0.
  26.40  0.00  0.00     1465.       823.      2288.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ERCTTXWIN410     (a)                     NONE     0.00  0.00 71.00   224. 138.
  26.40  0.00  0.00      387.       199.       586.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
  ERCT  SOLAR00     000000 00              NONE     0.00  0.00 71.00     1.   0.
  47.00  0.00  0.00        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other                18
  ERCT  OTHER00     000000 00              NONE     0.00  0.00  0.00    10.   0.
 103.60  0.00  0.00       44.        35.        79.     0.48     0.38     0.87
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                    19
  ERCTTXWASTE271    000000 00              WASTE    0.42  0.00  0.00     2.   0.
 108.60  0.00  0.00        9.         7.        16.     0.10     0.08     0.17
   0.020    0.016    0.036       0.000       0.000         0.000         0.000
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
Cgn_Gas                         23
  ERCTTXCGCT 1912   000000 00              GAS      0.10  0.00  0.00    17.   0.
   7.80  0.00  1.03        0.         3.         3.     0.00     0.03     0.03
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  ERCTTXCGCT 1922   000000 00              GAS      0.08  0.00  0.00  2033.   0.
   2.80  0.00  1.03        0.       350.       350.     0.00     3.67     3.67
   0.000    0.150    0.150       0.000       0.000         0.195         0.053
  ERCTTXCGCT 2312   000000 00              GAS      0.10  0.00  0.00    10.   0.
   7.80  1.03  1.03        2.         5.         7.     0.02     0.05     0.07
   0.001    0.002    0.004       0.000       0.000         0.004         0.001
  ERCTTXCGCT 2711   000000 00              GAS      0.10  0.00  0.00    22.   0.
   2.80  1.03  1.03       15.        34.        49.     0.13     0.29     0.42
   0.007    0.015    0.021       0.000       0.000         0.022         0.006
  ERCTTXCGCC 1911   000000 00              GAS      0.13  0.00  0.00    19.   0.
  13.90  1.03  1.03       38.        49.        87.     0.20     0.26     0.47
   0.013    0.017    0.031       0.000       0.000         0.025         0.007
  ERCTTXCGCC 1912   000000 00              GAS      0.13  0.00  0.00    28.   0.
  13.90  1.03  1.03        6.        14.        21.     0.05     0.11     0.15
   0.003    0.007    0.010       0.000       0.000         0.008         0.002
  ERCTTXCGCC 1913   000000 00              GAS      0.13  0.00  0.00    18.   0.
  19.90  0.00  1.03        0.         3.         3.     0.00     0.03     0.03
   0.000    0.002    0.002       0.000       0.000         0.002         0.000
  ERCTTXCGCC 1921   000000 00              GAS      0.13  0.00  0.00   368.   0.
  19.90  1.03  1.03      247.       569.       816.     1.54     3.55     5.09
   0.101    0.232    0.333       0.000       0.000         0.270         0.074
  ERCTTXCGCC 1922   000000 00              GAS      0.04  0.00  0.00  2500.   0.
  14.00  1.03  1.03     1680.      3867.      5547.    12.71    29.24    41.95
   0.273    0.629    0.902       0.000       0.000         2.226         0.607
  ERCTTXCGCC 1923   000000 00              GAS      0.13  0.00  0.00   110.   0.
  14.30  0.00  1.03        0.        19.        19.     0.00     0.17     0.17
   0.000    0.011    0.011       0.000       0.000         0.009         0.003
  ERCTTXCGCC 2313   000000 00              GAS      0.13  0.00  0.00     3.   0.
  19.00  1.03  1.03        2.         5.         7.     0.02     0.04     0.06
   0.001    0.003    0.004       0.000       0.000         0.003         0.001
  ERCTTXCGCC 2322   000000 00              GAS      0.02  0.00  0.00  1513.   0.
  13.90  1.03  1.03     3051.      3901.      6952.    22.88    29.26    52.14
   0.229    0.293    0.521       0.000       0.000         2.767         0.755
  ERCTTXCGCC 2323   000000 00              GAS      0.13  0.00  0.00   246.   0.
  18.90  1.03  1.03       55.       127.       182.     0.57     1.30     1.87
   0.037    0.085    0.122       0.000       0.000         0.099         0.027
  ERCTTXCGCC 2711   000000 00              GAS      0.13  0.00  0.00    81.   0.
  13.90  1.03  1.03      363.       278.       641.     1.98     1.52     3.49
```

```
   0.129    0.099    0.229       0.000       0.000         0.185         0.051
  ERCTTXCGCC 2722   000000 00              GAS      0.06  0.00  0.00   782.   0.
  13.90  1.03  1.03     1577.      2016.      3593.    12.28    15.70    27.98
   0.362    0.463    0.825       0.000       0.000         1.485         0.405
  ERCTTXCGCC 3513   000000 00              GAS      0.13  0.00  0.00    77.   0.
  19.90  1.03  1.03       17.        40.        57.     0.18     0.41     0.59
   0.012    0.027    0.039       0.000       0.000         0.031         0.009
  ERCTTXCGCC 3523   000000 00              GAS      0.13  0.00  0.00   217.   0.
  19.90  1.03  1.03       49.       112.       160.     0.48     1.10     1.58
   0.031    0.072    0.103       0.000       0.000         0.084         0.023
Cgn_Oil                        24
Cgn_Other                      25
  ERCTTXCGFWT192    000000 00              WASTE    0.42  0.00 20.87   162.   0.
 103.60  0.00  0.00      109.       249.       357.     0.65     1.48     2.12
   0.134    0.307    0.441       0.000       0.022         0.000         0.000
  ERCT  CGOTH00     000000 00              NONE     0.00  0.00  0.00     1.   0.
 103.60  0.00  0.00        4.         3.         8.     0.03     0.03     0.06
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
  ERCTTXTSBLU2241302020110 02     LD01     LF2: 9.8 0.30  0.29  9.79   563.  19.
  32.27  3.64  3.64     1502.         0.      1502.    15.98     0.00    15.98
   2.397    0.000    2.397       2.317       0.078         1.561         0.426
  ERCTTXTSBLU2241302020110 02     LD01     LF1: 5.9 0.30  0.29  5.88   563.  19.
  32.27  3.64  3.64        0.      1554.      1554.     0.00    16.54    16.54
   0.000    2.481    2.481       2.398       0.049         1.616         0.441
  ERCTTXTSBLU2241302020410 02     LD01     LF2: 9.8 0.30  0.29  9.79  1116.  19.
  32.27  3.64  3.64     1353.      2720.      4073.    14.44    29.04    43.48
   2.166    4.356    6.522       6.305       0.213         4.248         1.159
  ERCTTXTSBLU2241302020410 02     LD01     LF1: 5.9 0.30  0.29  5.88  1116.  19.
  32.27  3.64  3.64     1624.       361.      1985.    17.34     3.85    21.19
   2.600    0.578    3.179       3.073       0.062         2.070         0.565
  ERCTTXTSBLU2242302020410 02     LD01     LF2: 9.8 0.30  0.29  9.79   242.  20.
  32.37  3.73  3.73      294.       389.       682.     3.26     4.32     7.59
   0.485    0.642    1.127       1.100       0.037         0.741         0.202
  ERCTTXTSBLU2242302020410 02     LD01     LF1: 5.9 0.30  0.29  5.88   242.  20.
  32.37  3.73  3.73      352.       280.       632.     3.92     3.11     7.03
   0.582    0.462    1.044       1.019       0.021         0.687         0.187
  ERCTTXTSBSU2341292020110 01     LD01     BD1: 5.1 0.32  0.15  3.24   305.  19.
  28.08  3.51  3.51     1268.      1007.      2274.    12.62    10.02    22.64
   2.000    1.589    3.589       1.698       0.037         2.108         0.575
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  ERCTTXTSASU1941291020310 01     SCR2     SB2: 6.5 0.05  1.00  1.75   650.   7.
  22.80  0.00  2.41        0.      1377.      1377.     0.00    14.13    14.13
   0.000    0.360    0.360       7.066       0.012         1.364         0.372
  ERCTTXTSASU1941292020310 01     SCR1     SB2: 6.5 0.05  1.00  1.75  1210.   7.
  25.00  0.00  2.41        0.      2563.      2563.     0.00    25.72    25.72
   0.000    0.643    0.643      12.862       0.023         2.482         0.677
Ret.ExistScrub & SCR           41
  ERCTTXTSXLS2341302020103 02     SCR1     LF2: 9.8 0.05  0.39  5.48  1440.   7.
  41.00  3.80  3.80     5976.      4746.     10723.    61.28    48.67   109.95
   1.532    1.217    2.749      21.523       0.301        10.743         2.930
  ERCTTXTSXLS2342302020103 02     SCR1     LF2: 9.8 0.05  0.77  5.48   189.   7.
```

```
  41.40  3.81  3.81      504.       521.      1025.     5.60     5.80    11.41
   0.140    0.145    0.285       4.416       0.031         1.114         0.304
  ERCTTXTSXSS1941292020303 01     SCR1     SB2: 6.5 0.05  0.10  0.97   555.   7.
  41.00  3.82  3.82     1481.      1829.      3310.    15.12    18.68    33.80
   0.378    0.467    0.845       1.707       0.016         3.261         0.889
  ERCTTXTSXSS2341292020103 01     SCR1     SD2: 6.7 0.05  0.07  2.28   435.   8.
  41.00  3.85  3.85     1805.      1434.      3239.    18.05    14.34    32.39
   0.451    0.358    0.810       1.134       0.037         3.125         0.852
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  ERCTTXTSBLU2242302020410 02     RD01     LF2: 9.8 0.05  0.29  9.79   311.  27.
  32.77  4.61  4.61      377.       499.       876.     4.19     5.55     9.75
   0.105    0.139    0.244       1.413       0.048         0.952         0.260
  ERCTTXTSBLU2242302020410 02     RD01     LF1: 5.9 0.05  0.29  5.88   311.  27.
  32.77  4.61  4.61      453.       359.       812.     5.03     4.00     9.03
   0.126    0.100    0.226       1.310       0.027         0.883         0.241
  ERCTTXTSASU1941292020310 01     SCR1LD01 BD1: 5.1 0.05  0.15  0.25     0.  26.
   0.00  4.44  4.44        2.         1.         3.     0.02     0.02     0.03
   0.000    0.000    0.001       0.003       0.000         0.003         0.001
  ERCTTXTSASU2341292020110 01     SCR1ML02 BD1: 5.1 0.05  0.06  0.51   793.  35.
  34.83  3.47  3.47     3291.      2614.      5905.    34.25    27.21    61.46
   0.856    0.680    1.536       1.844       0.016         5.723         1.561
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
  ERCTTXSTHSU2021   000000 00     SCN1     GAS      0.10  0.00  0.00   185.   1.
  20.70  0.00  3.02        0.       195.       195.     0.00     1.94     1.94
   0.000    0.094    0.094       0.000       0.000         0.103         0.028
  ERCTTXSTHSU2421   000000 00     SCN1     GAS      0.16  0.00  0.00   795.   1.
  20.30  0.00  3.02        0.       838.       838.     0.00     8.14     8.14
   0.000    0.643    0.643       0.000       0.000         0.432         0.118
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: MACE     (Emissions By Plant)
-------------------------------------------------

            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  MACE  TSXBD0141031010107 01              BG1: 8.0 0.39  0.30  3.70   155.   0.
  43.10  3.85  3.85      643.       511.      1154.     6.37     5.06    11.43
   1.229    0.976    2.205       1.714       0.021         1.064         0.290
  MACE  TSZBD0241032020707 01              BG1: 8.0 0.27  0.16  4.66   144.   0.
  43.10  3.85  3.85      598.       475.      1072.     6.19     4.91    11.10
   0.823    0.653    1.476       0.916       0.026         1.034         0.282
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
  MACEDETSABN0241032020102 01              BA2: 5.2 0.20  1.10  3.31   403.   0.
  22.60  2.45  2.45     1401.       854.      2255.    14.41     8.79    23.20
   1.463    0.892    2.355      12.760       0.038         2.160         0.589
  MACE  TSBBN0231032020102 01              BA2: 5.2 0.26  1.10  3.31    84.   0.
  32.20  2.45  2.45      292.       178.       470.     3.02     1.84     4.86
   0.385    0.235    0.620       2.673       0.008         0.453         0.123
  MACE  TSBBN0241032020102 01              BA2: 5.2 0.22  1.10  3.31   167.   0.
  32.20  2.45  2.45      581.       461.      1042.     5.66     4.50    10.16
   0.620    0.492    1.113       5.588       0.017         0.946         0.258
  MACEDETSCBN0241032020102 01              BA2: 5.2 0.28  1.10  3.31   162.   0.
  26.60  2.45  2.45      672.       447.      1120.     6.21     4.13    10.35
   0.879    0.585    1.464       5.690       0.017         0.963         0.263
  MACEVATOLBO0332092020202 01              BA2: 5.2 0.20  1.10  4.65   176.   0.
  32.30  1.54  1.54      470.       260.       729.     5.57     3.08     8.65
   0.565    0.313    0.878       4.758       0.020         0.806         0.220
  MACEVATOLBO0341092020202 01              BA2: 5.2 0.23  1.10  4.65   306.   0.
  32.30  1.54  1.54     1270.       845.      2115.    12.27     8.16    20.43
   1.399    0.930    2.329      11.236       0.048         1.902         0.519
Unscrubbed Coal                4
  MACE  TSCBU0131032020310 01              BA2: 5.2 0.39  1.10  0.57    80.   0.
  32.00  1.54  1.54      278.       221.       499.     2.86     2.28     5.14
   0.564    0.448    1.013       2.827       0.001         0.479         0.131
  MACEDETSCBU0231032020110 01              BA2: 5.2 0.40  1.10  3.31   178.   0.
  32.00  1.54  1.54      619.       377.       996.     6.17     3.76     9.93
   1.241    0.756    1.997       5.464       0.016         0.925         0.252
  MACENJTSLBU0112032020710 01              BA2: 5.2 0.28  1.10  5.17    23.   0.
  26.40  1.54  1.54       95.        76.       171.     1.10     0.87     1.97
   0.154    0.122    0.276       1.083       0.005         0.183         0.050
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  MACE  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1155.   0.
 191.50  0.98  0.98     4789.      4237.      9026.    51.64    45.68    97.32
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1112.   0.
 165.10  0.64  0.64     5540.      3291.      8831.    57.82    34.35    92.16
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1109.   0.
```

```
 165.10  0.64  0.64     5287.      3612.      8899.    55.75    38.09    93.84
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1248.   0.
 139.40  0.46  0.46     5830.      4578.     10408.    61.88    48.59   110.48
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1207.   0.
 139.40  0.46  0.46     5879.      4188.     10067.    61.77    44.01   105.78
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   605.   0.
 254.60  1.32  1.32     1999.      2219.      4218.    21.47    23.84    45.30
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1150.   0.
 191.50  0.98  0.98     4831.      4219.      9049.    51.63    45.08    96.71
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1131.   0.
 163.80  0.78  0.78     5754.      3160.      8914.    62.27    34.20    96.47
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  MACE  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   522.   0.
  15.50  0.00  0.00     2346.      1770.      4115.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  MACE  CC   0122   000000 00              GAS      0.04  0.00  0.00  3085.   0.
  13.90  1.03  1.03     6220.      5583.     11803.    48.01    43.09    91.11
   0.936    0.840    1.777       0.000       0.000         4.835         1.319
  MACE  CC   0123   000000 00              GAS      0.10  0.00  0.00   762.   0.
  19.50  1.03  1.03      170.       392.       563.     1.79     4.11     5.89
   0.092    0.212    0.304       0.000       0.000         0.313         0.085
  MACE  CC   0222   000000 00              GAS      0.04  0.00  0.00  1287.   0.
  13.90  1.03  1.03     2907.      3318.      6226.    22.45    25.63    48.08
   0.404    0.461    0.865       0.000       0.000         2.552         0.696
  MACE  CC   0224   000000 00              GAS      0.10  0.00  0.00   224.   0.
  18.90  0.00  1.03        0.        38.        38.     0.00     0.45     0.45
   0.000    0.023    0.023       0.000       0.000         0.024         0.007
IGCC                            10
Turbine                         11
  MACE  CT   0113   000000 00              GAS      0.13  0.00  0.00    22.   0.
  11.20  0.00  1.03        0.         4.         4.     0.00     0.05     0.05
   0.000    0.003    0.003       0.000       0.000         0.003         0.001
  MACE  CT   0114   000000 00              GAS      0.11  0.00  0.00   612.   0.
  11.20  0.00  1.03        0.        28.        28.     0.00     0.41     0.41
   0.000    0.022    0.022       0.000       0.000         0.022         0.006
  MACE  CT   0122   000000 00              GAS      0.08  0.00  0.00  1024.   0.
   3.40  1.03  1.03       13.       530.       543.     0.15     5.82     5.97
   0.006    0.247    0.254       0.000       0.000         0.317         0.086
  MACE  CT   0123   000000 00              GAS      0.11  0.00  0.00  1635.   0.
  10.40  0.00  1.03        0.       282.       282.     0.00     3.74     3.74
   0.000    0.206    0.206       0.000       0.000         0.199         0.054
  MACE  CT   0212   000000 00              GAS      0.10  0.00  0.00     3.   0.
   2.80  1.03  1.03        1.         2.         2.     0.01     0.02     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  MACE  CT   0213   000000 00              GAS      0.13  0.00  0.00    62.   0.
  11.20  0.00  1.03        0.        11.        11.     0.00     0.15     0.15
   0.000    0.009    0.009       0.000       0.000         0.008         0.002
  MACE  CT   0214   000000 00              GAS      0.13  0.00  0.00   420.   0.
  11.10  0.00  1.03        0.        72.        72.     0.00     1.03     1.03
   0.000    0.068    0.068       0.000       0.000         0.055         0.015
  MACE  CT   0222   000000 00              GAS      0.09  0.00  0.00  1923.   0.
   3.30  0.00  1.03        0.       902.       902.     0.00     9.91     9.91
   0.000    0.446    0.446       0.000       0.000         0.526         0.143
  MACE  CT   0223   000000 00              GAS      0.13  0.00  0.00   190.   0.
  11.20  0.00  1.03        0.        33.        33.     0.00     0.39     0.39
   0.000    0.025    0.025       0.000       0.000         0.021         0.006
  MACEVACT   0312   000000 00              GAS      0.11  0.00  0.00     4.   0.
   9.10  1.03  1.03        3.         2.         5.     0.03     0.02     0.04
```

```
   0.001    0.001    0.003       0.000       0.000         0.002         0.001
  MACEVACT   0314   000000 00              GAS      0.11  0.00  0.00    12.   0.
  11.20  0.00  1.03        0.         2.         2.     0.00     0.03     0.03
   0.000    0.002    0.002       0.000       0.000         0.002         0.000
  MACEVACT   0323   000000 00              GAS      0.13  0.00  0.00    26.   0.
  11.20  0.00  1.03        0.         4.         4.     0.00     0.06     0.06
   0.000    0.004    0.004       0.000       0.000         0.003         0.001
Biomass                          12
  MACE  BIOMS00  44 000000 00              B1-: 0.6 0.02  0.08  0.57     8.   0.
  44.80  5.36  5.36       35.        27.        61.     0.28     0.21     0.49
   0.003    0.002    0.005       0.020       0.000         0.000         0.000
  MACE  BIOCC0     (a)                     B1-: 0.6 0.02  0.08  0.57    57. 192.
  44.80  5.34  5.34      252.       182.       435.     2.08     1.50     3.57
   0.021    0.015    0.036       0.143       0.001         0.000         0.000
Geothermal                       13
Landfill Gas                     14
  MACE  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    24.   0.
  78.60 10.48 10.48      107.        82.       189.     1.35     1.03     2.37
   0.166    0.126    0.292       0.000       0.000         0.000         0.000
  MACE  LG   0     (a)                     WASTE    0.25  0.00  0.00   125. 174.
  78.60 10.48 10.48      543.       392.       934.     5.43     3.92     9.34
   0.667    0.482    1.149       0.000       0.000         0.000         0.000
Wind                             15
  MACE  WIND 00     000000 00              NONE     0.00  0.00 71.00    14.   0.
  26.40  0.00  0.00       20.        11.        31.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACE  WIN410     (a)                     NONE     0.00  0.00 71.00   126. 139.
  26.40  0.00  0.00      218.       112.       330.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                        16
  MACE  FCELL00     000000 00              GAS      0.40  0.00  0.00    15.   0.
  15.00  2.06  2.06       31.        23.        54.     0.23     0.17     0.40
   0.046    0.034    0.080       0.000       0.000         0.021         0.006
Solar                            17
Non Fossil_Other                 18
  MACE  OTHER00     000000 00              NONE     0.00  0.00 71.00   257.   0.
 103.60  0.00  0.00     1133.       893.      2026.    12.46     9.83    22.29
   0.000    0.000    0.000       0.000       0.791         0.000         0.000
Fossil_Other                     19
Pump Storage                     20
  MACE  PUMPS00     000000 00              NONE     0.00  0.00 71.00  1280.   0.
   6.50  0.00  0.00      264.       199.       463.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                     21
Cgn_Coal                         22
  MACE  CGCOU0211412050710 01              BA2: 5.2 0.40  1.10  5.17     8.   0.
  22.40  1.54  1.54       32.        26.        59.     0.29     0.23     0.52
   0.058    0.047    0.104       0.286       0.001         0.048         0.013
Cgn_Gas                          23
  MACE  CGCT 0111   000000 00              GAS      0.11  0.00  0.00     6.   0.
   2.80  1.03  1.03        4.         3.         7.     0.04     0.03     0.06
   0.002    0.001    0.003       0.000       0.000         0.003         0.001
  MACE  CGCT 0112   000000 00              GAS      0.11  0.00  0.00    13.   0.
   7.80  1.03  1.03        9.         7.        16.     0.09     0.06     0.15
   0.005    0.004    0.008       0.000       0.000         0.008         0.002
  MACE  CGCT 0122   000000 00              GAS      0.08  0.00  0.00   170.   0.
   2.80  1.03  1.03       39.        88.       127.     0.43     0.96     1.39
   0.017    0.038    0.056       0.000       0.000         0.074         0.020
  MACE  CGCT 0222   000000 00              GAS      0.08  0.00  0.00    88.   0.
   2.80  1.03  1.03       20.        46.        66.     0.22     0.50     0.72
   0.009    0.020    0.029       0.000       0.000         0.038         0.010
  MACE  CGCC 0111   000000 00              GAS      0.10  0.00  0.00    21.   0.
  18.90  1.03  1.03       94.        54.       148.     0.62     0.36     0.98
   0.033    0.019    0.051       0.000       0.000         0.052         0.014
  MACE  CGCC 0112   000000 00              GAS      0.10  0.00  0.00    16.   0.
```

```
  18.90  1.03  1.03       11.        25.        35.     0.09     0.20     0.29
   0.005    0.011    0.015       0.000       0.000         0.016         0.004
  MACE  CGCC 0113   000000 00               GAS      0.10  0.00  0.00    76.   0.
  18.90  1.03  1.03       51.        39.        90.     0.48     0.37     0.84
   0.025    0.019    0.044       0.000       0.000         0.045         0.012
  MACE  CGCC 0121   000000 00               GAS      0.10  0.00  0.00    41.   0.
  13.90  1.03  1.03      184.       106.       289.     1.22     0.70     1.92
   0.064    0.037    0.101       0.000       0.000         0.102         0.028
  MACE  CGCC 0122   000000 00               GAS      0.10  0.00  0.00  1517.   0.
  13.90  1.03  1.03     3059.      2346.      5405.    24.51    18.80    43.31
   1.287    0.987    2.274       0.000       0.000         2.298         0.627
  MACE  CGCC 0123   000000 00               GAS      0.10  0.00  0.00   628.   0.
  19.20  1.03  1.03      309.       323.       633.     2.95     3.08     6.03
   0.155    0.162    0.316       0.000       0.000         0.320         0.087
  MACE  CGCC 0221   000000 00               GAS      0.19  0.00  0.00   188.   0.
  13.90  1.03  1.03      843.       646.      1489.     4.80     3.68     8.47
   0.444    0.340    0.784       0.000       0.000         0.450         0.123
  MACE  CGCC 0222   000000 00               GAS      0.02  0.00  0.00   725.   0.
  13.90  1.03  1.03     2437.      1869.      4306.    18.28    14.02    32.30
   0.183    0.140    0.323       0.000       0.000         1.714         0.467
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
  MACE  TCOLC0141012050301 01     ML01     BE3:18.4 0.05  0.09  1.84   196.  30.
  24.06  3.55  3.55      813.       645.      1458.     8.63     6.85    15.48
   0.211    0.168    0.379       0.681       0.014         1.442         0.393
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
  MACE  TSZBS0241032020203 01     SCR1     BE3:18.4 0.05  0.15  1.84   581.   9.
  43.40  3.89  3.89     2411.      1915.      4326.    24.06    19.11    43.18
   0.602    0.478    1.079       3.277       0.040         4.021         1.097
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  MACE  CGCOU0141012050710 01     ML01SCR1 BE3:18.4 0.05  0.09  1.84   183.  39.
  24.15  3.43  3.43      741.       598.      1339.     6.32     5.10    11.43
   0.158    0.128    0.286       0.503       0.011         1.064         0.290
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
```

```
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
  MACE  TSABA0141011020206 01     HG01     BE3:18.4 0.05  0.22  1.84   600.   4.
  48.30  4.17  4.17     2490.      1978.      4468.    23.65    18.78    42.43
   0.544    0.432    0.976       4.667       0.039         3.951         1.078
  MACE  TSDBA0141011020206 01     HG01     BE3:18.4 0.08  0.22  1.84   642.   5.
  49.40  4.16  4.16     2664.      2116.      4781.    24.66    19.58    44.24
   1.036    0.822    1.858       4.866       0.041         4.120         1.124
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------
Year: 2020, Region: MACW     (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
  MACW  TCOLA0241052050705 01              BG1: 8.0 0.01  0.25  0.80   520.   0.
  23.60  3.91  3.91     2158.      1714.      3872.    19.42    15.43    34.85
   0.107    0.085    0.192       4.356       0.014         3.245         0.885
  MACW  TSFBA0241412020105 01              BE3:18.4 0.05  0.11  1.84   650.   0.
  43.30  3.91  3.91     2698.      2142.      4840.    26.39    20.96    47.35
   0.594    0.472    1.065       2.604       0.044         4.409         1.203
Scrubbed Coal                  2
  MACW  TCOLS0231412050304 01              BD2:12.5 0.40  0.36  5.02    32.   0.
  23.10  2.94  2.94      133.       105.       238.     1.38     1.10     2.48
   0.277    0.220    0.497       0.446       0.006         0.231         0.063
Unscrubbed Coal_NOx            3
  MACW  TSZBN0241031020102 01              BA2: 5.2 0.37  1.10  3.31   136.   0.
  32.20  2.45  2.45      363.       288.       651.     3.62     2.87     6.49
   0.676    0.537    1.213       3.568       0.011         0.604         0.165
Unscrubbed Coal                4
  MACW  TCOLU0211412050210 01              BD2:12.5 0.40  1.50 12.54    82.   0.
  32.00  1.54  1.54      340.       270.       611.     3.54     2.81     6.35
   0.710    0.564    1.273       4.763       0.040         0.591         0.161
  MACW  TCOLU0231412050710 01              BA2: 5.2 0.40  1.10  5.17    82.   0.
```

```
  11.70  1.54  1.54      285.       174.       459.     2.96     1.81     4.77
   0.594    0.362    0.957       2.624       0.012         0.444         0.121
  MACW  TOLBU0231032020110 01              BA2: 5.2 0.37  1.10  3.31   241.   0.
  32.00  1.54  1.54      307.       243.       550.     3.18     2.53     5.71
   0.589    0.468    1.057       3.142       0.009         0.532         0.145
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  MACW  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1140.   0.
 142.40  0.57  0.57     5471.      3734.      9205.    57.47    39.23    96.70
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACW  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1146.   0.
 142.40  0.57  0.57     5830.      3337.      9167.    60.96    34.90    95.86
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACW  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   806.   0.
 181.30  0.93  0.93     3542.      2542.      6085.    39.49    28.34    67.83
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  MACW  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   649.   0.
  14.90  0.00  0.00     1512.       632.      2144.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  MACW  CC   0222   000000 00              GAS      0.02  0.00  0.00  2689.   0.
  13.90  1.03  1.03     8758.      4159.     12917.    65.69    31.19    96.88
   0.657    0.312    0.969       0.000       0.000         5.141         1.402
IGCC                           10
Turbine                        11
  MACW  CT   0222   000000 00              GAS      0.08  0.00  0.00   671.   0.
   2.80  0.00  1.03        0.       116.       116.     0.00     1.26     1.26
   0.000    0.051    0.051       0.000       0.000         0.067         0.018
  MACW  CT   0223   000000 00              GAS      0.11  0.00  0.00   113.   0.
  11.20  0.00  1.03        0.        19.        19.     0.00     0.24     0.24
   0.000    0.014    0.014       0.000       0.000         0.013         0.003
Biomass                        12
  MACW  BIOMS00  44 000000 00              B1-: 0.6 0.02  0.08  0.57    17.   0.
  44.80  5.36  5.36       74.        57.       131.     0.68     0.53     1.20
   0.007    0.005    0.012       0.048       0.000         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  MACW  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     1.   0.
  78.60 10.48 10.48        4.         3.         8.     0.06     0.05     0.11
   0.008    0.006    0.013       0.000       0.000         0.000         0.000
Wind                           15
  MACW  WIND 00     000000 00              NONE     0.00  0.00 71.00    10.   0.
  26.40  0.00  0.00       17.        10.        27.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  MACW  OTHER00     000000 00              NONE     0.00  0.00 65.04   119.   0.
 103.60  0.00  0.00      525.       414.       938.     5.77     4.55    10.32
   0.000    0.000    0.000       0.000       0.336         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
  MACW  PUMPS00     000000 00              NONE     0.00  0.00 71.00   391.   0.
   6.50  0.00  0.00       81.       175.       256.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
  MACW  CGCOU0211412050710 01              BA2: 5.2 0.40  1.10  5.17    44.   0.
  21.10  1.54  1.54      178.       144.       322.     1.56     1.26     2.81
   0.312    0.252    0.563       1.546       0.007         0.262         0.071
  MACW  CGCOU0231412050710 01              BA2: 5.2 0.40  1.10  5.17    82.   0.
  11.70  1.54  1.54      332.       268.       600.     2.66     2.15     4.81
   0.534    0.431    0.964       2.645       0.012         0.448         0.122
```

```
  MACW  CGCOU0232412050710 01              BA2: 5.2 0.40  1.10  5.17   120.   0.
  20.50  1.54  1.54      312.       176.       488.     3.39     1.91     5.30
   0.680    0.383    1.063       2.916       0.014         0.494         0.135
  MACW  CGCOU0241412050710 01              BA2: 5.2 0.40  1.10  5.17   101.   0.
  16.70  1.54  1.54      409.       330.       739.     3.50     2.82     6.32
   0.701    0.566    1.266       3.474       0.016         0.588         0.160
  MACW  CGCOD0231412050307 01              BE3:18.4 0.26  0.53  0.55    87.   0.
  23.30  3.84  3.84      352.       284.       636.     2.82     2.28     5.10
   0.368    0.297    0.666       1.347       0.001         0.475         0.130
Cgn_Gas                        23
  MACW  CGCT 0212   000000 00              GAS      0.13  0.00  0.00    33.   0.
   7.80  1.03  1.03        8.        17.        25.     0.08     0.17     0.25
   0.005    0.011    0.016       0.000       0.000         0.013         0.004
  MACW  CGCT 0222   000000 00              GAS      0.08  0.00  0.00   145.   0.
   2.80  0.00  1.03        0.        25.        25.     0.00     0.27     0.27
   0.000    0.011    0.011       0.000       0.000         0.014         0.004
  MACW  CGCC 0213   000000 00              GAS      0.19  0.00  0.00    80.   0.
  18.90  1.03  1.03       18.        41.        59.     0.17     0.38     0.55
   0.015    0.035    0.051       0.000       0.000         0.029         0.008
  MACW  CGCC 0223   000000 00              GAS      0.19  0.00  0.00   206.   0.
  18.90  1.03  1.03       46.       106.       152.     0.43     0.99     1.42
   0.040    0.091    0.131       0.000       0.000         0.075         0.020
Cgn_Oil                        24
Cgn_Other                      25
  MACW  CGBIO00  44 000000 00              B1-: 0.6 0.02  0.08  0.57    11.   0.
  44.80  5.36  5.36       48.        37.        85.     0.38     0.29     0.68
   0.004    0.003    0.007       0.027       0.000         0.000         0.000
  MACW  CGOTH00     000000 00              NONE     0.00  0.00 17.04    25.   0.
 103.60  0.00  0.00      108.        84.       192.     0.45     0.35     0.80
   0.000    0.000    0.000       0.000       0.007         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
  MACW  TSCBU0241032020310 01     ML02     BE3:18.4 0.38  0.09  0.55   314.  28.
  42.99  2.49  2.49     1304.      1036.      2340.    12.43     9.87    22.30
   2.343    1.861    4.203       0.981       0.006         2.077         0.566
Ret.ExistSCR & Scrub           38
  MACW  TSHBC0241411020101 01     LO01     BG3:28.7 0.06  0.25  2.87   607.  21.
  35.28  3.87  3.87     2519.         0.      2519.    24.35     0.00    24.35
   0.792    0.000    0.792       3.044       0.035         2.268         0.619
  MACW  TSHBC0241411020101 01     LO01     BF2:11.1 0.06  0.15  1.11   607.  21.
  35.28  3.87  3.87        0.      2001.      2001.     0.00    19.34    19.34
   0.000    0.629    0.629       1.451       0.011         1.801         0.491
  MACW  TSHBC0241412020101 01     LO01     BG3:28.7 0.04  0.25  2.87  2075.  20.
  34.78  3.84  3.84        0.      5330.      5330.     0.00    49.76    49.76
   0.000    1.095    1.095       6.219       0.071         4.633         1.264
  MACW  TSHBC0241412020101 01     LO01     BF2:11.1 0.04  0.15  1.11  2075.  20.
  34.78  3.84  3.84     8610.      1508.     10117.    80.37    14.08    94.45
   1.768    0.310    2.078       7.084       0.052         8.795         2.399
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
  MACWPATSABS0241032020103 01     SCR1     BE3:18.4 0.05  0.11  1.84   125.  12.
  43.70  4.01  4.01      519.       412.       931.     5.44     4.32     9.76
   0.136    0.108    0.244       0.537       0.009         0.909         0.248
  MACW  TSYBS0241412020103 01     SCR1     BE3:18.4 0.05  0.09  1.84  1700.   6.
```

```
  43.00  3.78  3.78     7055.      5603.     12659.    64.84    51.50   116.33
   1.621    1.287    2.908       5.119       0.107        10.833         2.955
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  MACW  TCOLU0241412050710 01     RL01     BE3:18.4 0.05  0.09  1.84   213.  57.
  28.05  3.67  3.67      886.       703.      1589.     9.40     7.47    16.87
   0.235    0.187    0.422       0.742       0.016         1.571         0.429
  MACWPATSABU0241032020110 01     RL01     BE3:18.4 0.05  0.09  1.84   462.  45.
  46.19  3.59  3.59     1918.      1523.      3441.    19.79    15.72    35.50
   0.495    0.393    0.888       1.562       0.033         3.306         0.902
  MACW  TSCBU0241032020110 01     RL02     BE3:18.4 0.05  0.09  1.84  1328.  32.
  39.02  3.39  3.39     5509.      4376.      9885.    52.33    41.56    93.89
   1.308    1.039    2.347       4.131       0.086         8.743         2.385
  MACW  TSHBU0241412020110 01     SCR1LO01 BG3:28.7 0.05  0.25  2.87  1664.  25.
  36.93  3.74  3.74     6907.         0.      6907.    67.00     0.00    67.00
   1.675    0.000    1.675       8.375       0.096         6.239         1.702
  MACW  TSHBU0241412020110 01     SCR1LO01 BF2:11.1 0.05  0.15  1.11  1664.  25.
  36.93  3.74  3.74        0.      5486.      5486.     0.00    53.21    53.21
   0.000    1.330    1.330       3.991       0.030         4.955         1.351
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
  MACW  CGCOS0231412050304 01     HG08     BE3:18.4 0.40  0.11  1.84    42.   0.
  47.90  3.07  3.07      170.       137.       307.     1.51     1.22     2.73
   0.303    0.245    0.548       0.150       0.003         0.255         0.069
  MACW  CGCOS0232412050304 01     HG08     BE3:18.4 0.40  0.53  1.84   100.   0.
  34.40  3.10  3.10       72.       327.       398.     0.78     3.56     4.33
   0.156    0.713    0.869       1.144       0.004         0.404         0.110
  MACW  CGCOS0232412050304 01     HG08     BD2:12.5 0.40  0.36  1.25   100.   0.
  34.40  3.10  3.10      333.         0.       333.     3.63     0.00     3.63
   0.727    0.000    0.727       0.653       0.002         0.338         0.092
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Year: 2020, Region: MACS     (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       SUMMER      Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  MACS  NUKE 00    9000000 00              NUC      0.00  0.00  0.00   875.   0.
 161.00  0.61  0.61     4245.      2789.      7033.    46.08    30.28    76.36
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MACS  NUKE 00    9000000 00              NUC      0.00  0.00  0.00   850.   0.
 161.00  0.61  0.61     4080.      2672.      6751.    44.38    29.06    73.44
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  MACS  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00    18.   0.
  15.50  0.00  0.00       43.        16.        59.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  MACS  CC   0222   000000 00              GAS      0.08  0.00  0.00   142.   0.
  13.90  1.03  1.03      231.       220.       450.     1.96     1.87     3.83
   0.078    0.075    0.153       0.000       0.000         0.203         0.055
  MACS  CC   1     (b)                     GAS      0.02  0.00  0.00   978.  68.
  11.70  1.95  1.95     3372.      2434.      5806.    23.79    17.17    40.96
   0.238    0.172    0.410       0.000       0.000         2.174         0.593
IGCC                          10
Turbine                       11
  MACS  CT   0211   000000 00              GAS      0.13  0.00  0.00     6.   0.
   2.80  1.03  1.03        4.         9.        13.     0.04     0.09     0.12
   0.002    0.005    0.008       0.000       0.000         0.007         0.002
  MACS  CT   0212   000000 00              GAS      0.10  0.00  0.00    45.   0.
   8.60  1.03  1.03       31.        23.        55.     0.30     0.23     0.53
   0.015    0.011    0.026       0.000       0.000         0.028         0.008
  MACS  CT   0214   000000 00              GAS      0.11  0.00  0.00   378.   0.
  11.20  0.00  1.03        0.        65.        65.     0.00     0.93     0.93
   0.000    0.051    0.051       0.000       0.000         0.049         0.013
  MACS  CT   0222   000000 00              GAS      0.11  0.00  0.00   578.   0.
   9.10  0.00  1.03        0.       100.       100.     0.00     1.10     1.10
   0.000    0.061    0.061       0.000       0.000         0.058         0.016
  MACS  CT   0223   000000 00              GAS      0.13  0.00  0.00   208.   0.
  11.20  0.00  1.03        0.        36.        36.     0.00     0.48     0.48
   0.000    0.030    0.030       0.000       0.000         0.025         0.007
  MACS  CT   0224   000000 00              GAS      0.11  0.00  0.00   920.   0.
   9.80  0.00  1.03        0.        80.        80.     0.00     1.14     1.14
   0.000    0.063    0.063       0.000       0.000         0.060         0.016
  MACSVACT   0322   000000 00              GAS      0.08  0.00  0.00   169.   0.
   2.80  1.03  1.03       39.        29.        68.     0.43     0.32     0.75
   0.017    0.013    0.030       0.000       0.000         0.040         0.011
```

```
  MACS  ACT  1     (b)                      GAS      0.10  0.00  0.00  2237.  53.
   7.80  2.94  2.94     1575.      1262.      2837.    13.46    10.79    24.26
   0.673    0.540    1.213       0.000       0.000         1.287         0.351
Biomass                        12
Geothermal                     13
Landfill Gas                   14
  MACS  LFGAS00     000000 00               WASTE    0.25  0.00  0.00     4.   0.
  78.60 10.48 10.48       18.        14.        32.     0.24     0.19     0.43
   0.030    0.023    0.053       0.000       0.000         0.000         0.000
Wind                           15
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  MACS  OTHER00     000000 00               NONE     0.00  0.00 71.00    55.   0.
 103.60  0.00  0.00      242.       191.       434.     2.67     2.10     4.77
   0.000    0.000    0.000       0.000       0.169         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
  MACS  CGCC 0223   000000 00               GAS      0.08  0.00  0.00   277.   0.
  13.90  1.03  1.03       62.       143.       205.     0.61     1.40     2.01
   0.024    0.056    0.081       0.000       0.000         0.107         0.029
Cgn_Oil                        24
Cgn_Other                      25
  MACS  CGOTH00     000000 00               NONE     0.00  0.00 71.00    54.   0.
 103.60  0.00  0.00      234.       181.       415.     0.98     0.76     1.74
   0.000    0.000    0.000       0.000       0.062         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
  MACSMDTSHBO0241081010302 01     ML01     BD2:12.5 0.51  0.06  0.38   372.  31.
  44.89  2.56  2.56     1544.      1226.      2770.    16.09    12.78    28.87
   4.070    3.233    7.303       0.866       0.005         2.688         0.733
Ret.ExistSCR & Scrub           38
  MACS  TSEBC0241072020101 01     ML02     BF2:11.1 0.05  0.12  1.11   317.  28.
  43.50  3.45  3.45     1316.       498.      1814.    12.29     4.65    16.94
   0.277    0.105    0.381       1.016       0.009         1.577         0.430
  MACS  TSEBC0241072020101 01     ML02     BE3:18.4 0.05  0.09  1.84   317.  28.
  43.50  3.45  3.45        0.       548.       548.     0.00     5.12     5.12
   0.000    0.115    0.115       0.225       0.005         0.476         0.130
  MACS  TSEBC0241072020201 01     LO01     BF2:11.1 0.05  0.15  1.11  1264.  21.
  28.13  3.93  3.93     5245.      4166.      9411.    53.70    42.65    96.34
   1.235    0.981    2.216       7.226       0.053         8.972         2.447
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  MACS  TSEBU0241072020110 01     RL01     BF2:11.1 0.05  0.12  1.11   132.  48.
  47.09  3.61  3.61        0.       436.       436.     0.00     4.46     4.46
   0.000    0.111    0.111       0.267       0.002         0.415         0.113
  MACS  TSEBU0241072020110 01     RL01     BE3:18.4 0.05  0.09  1.84   132.  48.
  47.09  3.61  3.61      549.         0.       549.     5.61     0.00     5.61
```

```
   0.140    0.000    0.140       0.247       0.005         0.522         0.142
  MACS  TSGBU0241082020110 01     RL01     BF2:11.1 0.05  0.12  1.11   535.  41.
  45.19  3.51  3.51        0.      1762.      1762.     0.00    16.89    16.89
   0.000    0.422    0.422       1.013       0.009         1.572         0.429
  MACS  TSGBU0241082020110 01     RL01     BE3:18.4 0.05  0.09  1.84   535.  41.
  45.19  3.51  3.51     2218.         0.      2218.    21.26     0.00    21.26
   0.532    0.000    0.532       0.935       0.020         1.980         0.540
  MACSMDTSDBU0241081020110 01     SCR2ML02 BE3:18.4 0.06  0.09  1.84  1808.  32.
  38.42  3.37  3.37     7505.      5960.     13465.    69.90    55.51   125.41
   2.237    1.776    4.013       5.518       0.116        11.679         3.185
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: WUMS     (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
```

```
Scrubbed Coal                    2
  WUMSWITOLBS1312162030304 01                BG1: 8.0 0.34  2.51  0.40    22.   0.
  43.00  2.94  2.94       91.        73.       164.     1.02     0.81     1.82
   0.172    0.137    0.308       2.290       0.000         0.170         0.046
  WUMSWITSGBS1231392020104 01                BD1: 5.1 0.30  0.72  2.79    80.   0.
  43.00  2.94  2.94      278.       221.       499.     2.86     2.27     5.13
   0.429    0.340    0.769       1.842       0.007         0.477         0.130
  WUMS  TSXBS0432392020304 01                BD1: 5.1 0.31  0.08  0.25    44.   0.
  40.60  2.94  2.94      183.       145.       328.     2.20     1.75     3.94
   0.340    0.270    0.609       0.154       0.000         0.367         0.100
Unscrubbed Coal_NOx              3
  WUMSWITSDSO1332392020102 01                SB1: 4.5 0.45  0.68  4.41    82.   0.
  32.30  1.54  1.54      285.       226.       511.     3.06     2.43     5.49
   0.685    0.544    1.230       1.878       0.012         0.530         0.144
Unscrubbed Coal                  4
  WUMS  TCOLU0411392020710 01                BB2: 4.1 0.46  1.00  4.10    25.   0.
  32.00  1.54  1.54      104.        82.       186.     1.08     0.86     1.94
   0.248    0.197    0.445       0.968       0.004         0.180         0.049
  WUMSWITCOLU1311162040310 01                SB2: 6.5 0.37  1.00  1.75    44.   0.
  32.00  1.54  1.54      183.       145.       328.     1.90     1.51     3.41
   0.353    0.281    0.634       1.704       0.003         0.329         0.090
  WUMSWITCOLU1311162050710 01                SB2: 6.5 0.37  1.00  6.48    22.   0.
  32.00  1.54  1.54       91.        73.       164.     0.95     0.75     1.70
   0.177    0.140    0.317       0.852       0.006         0.164         0.045
  WUMSWITCOLU1331392020110 01                BB2: 4.1 0.46  1.00  2.62    56.   0.
  32.00  1.54  1.54      232.       155.       387.     2.42     1.61     4.03
   0.556    0.370    0.926       2.013       0.005         0.375         0.102
  WUMSWITOLBU1311161020710 01                SB2: 6.5 0.78  1.00  6.48    14.   0.
  32.00  1.54  1.54       58.        46.       104.     0.60     0.48     1.08
   0.235    0.187    0.422       0.542       0.004         0.105         0.029
  WUMSWITOLBU1312162020210 01                SD2: 6.7 0.35  1.40  6.30    24.   0.
  32.00  1.54  1.54      100.        79.       179.     1.37     1.09     2.47
   0.244    0.194    0.438       1.726       0.008         0.238         0.065
  WUMSWITSCSU1341162020110 01                SB2: 6.5 0.31  0.68  6.29   525.   0.
  22.40  1.54  1.54     2179.      1730.      3909.    22.29    17.71    40.00
   3.511    2.789    6.300      13.520       0.126         3.859         1.052
  WUMSWITSCSU1341162020210 01                SB2: 6.5 0.30  1.00  6.09   525.   0.
  26.40  1.54  1.54     2179.      1472.      3651.    22.40    15.13    37.53
   3.360    2.270    5.630      18.766       0.114         3.621         0.988
  WUMSWITSCSU1341162020510 01                SB2: 6.5 0.20  0.65  1.75   334.   0.
  22.40  1.54  1.54     1386.      1101.      2487.    14.12    11.21    25.33
   1.426    1.132    2.558       8.282       0.022         2.443         0.666
  WUMSWITSCSU1342162020110 01                SB2: 6.5 0.23  0.65  6.29   402.   0.
  22.40  1.54  1.54     1668.      1325.      2993.    17.72    14.07    31.79
   2.064    1.639    3.704      10.332       0.100         3.067         0.836
  WUMSWITSDBU1241162020110 01                BB2: 4.1 0.31  0.78  2.62  1135.   0.
  32.00  1.54  1.54     2425.      1926.      4351.    21.58    17.14    38.72
   3.345    2.656    6.001      15.099       0.051         3.605         0.983
  WUMSWITSDSU1331392020110 01                SB1: 4.5 0.20  1.00  4.41    87.   0.
  32.00  1.54  1.54      351.       240.       592.     3.65     2.49     6.14
   0.370    0.253    0.623       3.069       0.014         0.592         0.162
  WUMSWITSDSU1332392020110 01                SB1: 4.5 0.43  0.78  4.41   183.   0.
  32.00  1.54  1.54      488.       388.       876.     5.84     4.64    10.48
   1.250    0.993    2.243       4.093       0.023         1.011         0.276
  WUMSWITSDSU1341392010210 01                SB1: 4.5 0.41  0.68  4.55   113.   0.
  32.00  1.54  1.54      469.       312.       781.     4.88     3.25     8.12
   0.993    0.660    1.653       2.770       0.018         0.784         0.214
  WUMSWITSDSU1342392010210 01                SB1: 4.5 0.41  0.70  4.55   113.   0.
  32.00  1.54  1.54      393.       312.       705.     4.22     3.35     7.57
   0.859    0.682    1.541       2.650       0.017         0.731         0.199
  WUMSWITSGBU1231392020110 01                BB2: 4.1 0.34  1.00  2.62   166.   0.
  32.00  1.54  1.54      577.       458.      1035.     5.96     4.73    10.69
   1.016    0.807    1.822       5.343       0.014         0.995         0.271
  WUMSWITSHBU1332162010110 01                SB2: 6.5 0.43  1.00  6.29   235.   0.
  32.00  1.54  1.54      627.       498.      1125.     7.44     5.91    13.34
```

```
   1.610    1.279    2.888       6.671       0.042         1.287         0.351
  WUMSWITSHBU1332162020110 01              SB2: 6.5 0.36  1.00  6.29    98.   0.
  32.00  1.54  1.54      341.       208.       548.     4.13     2.51     6.64
   0.736    0.449    1.185       3.320       0.021         0.641         0.175
  WUMS  TSHSU0432392020210 01              SB1: 4.5 0.32  1.00  4.28   258.   0.
  22.40  1.54  1.54      688.       547.      1235.     7.91     6.29    14.20
   1.278    1.015    2.293       7.100       0.030         1.370         0.374
  WUMS  TSJBU0431392020110 01              BB2: 4.1 0.41  1.00  2.62   177.   0.
  26.40  1.54  1.54      735.       489.      1223.     7.76     5.17    12.93
   1.592    1.059    2.651       6.465       0.017         1.204         0.328
  WUMS  TSJBU0431392020310 01              BB2: 4.1 0.40  1.00  0.45    37.   0.
  32.00  1.54  1.54      154.       102.       256.     1.60     1.06     2.66
   0.316    0.210    0.527       1.330       0.001         0.248         0.068
  WUMS  TSJBU0432392020310 01              BB2: 4.1 0.40  1.00  0.45   116.   0.
  32.00  1.54  1.54      481.       320.       802.     5.13     3.41     8.54
   1.015    0.675    1.690       4.269       0.002         0.795         0.217
  WUMS  TSKBU0411391020710 01              BB2: 4.1 0.85  1.00  4.10    47.   0.
  29.50  1.54  1.54      195.       155.       350.     2.03     1.61     3.64
   0.865    0.687    1.552       1.820       0.007         0.339         0.092
  WUMSWITSLBU1341392020110 01              BB2: 4.1 0.42  0.48  2.62   144.   0.
  32.00  1.54  1.54      598.       475.      1072.     6.08     4.83    10.91
   1.274    1.012    2.286       2.619       0.014         1.016         0.277
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  WUMS  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   512.   0.
 195.70  0.98  0.98     2290.      1487.      3777.    23.82    15.47    39.28
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  WUMS  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   514.   0.
 195.70  0.98  0.98     2240.      1589.      3830.    23.54    16.69    40.23
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  WUMS  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   498.   0.
 163.50  0.83  0.83     1783.      1741.      3523.    19.62    19.16    38.77
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  WUMS  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   354.   0.
  15.40  0.00  0.00     1007.       676.      1683.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  WUMSWICC   1322   000000 00              GAS      0.12  0.00  0.00   307.   0.
  13.90  1.03  1.03       619.       475.      1094.     5.26     4.04     9.30
   0.316    0.242    0.558       0.000       0.000         0.493         0.135
  WUMS  CC   8     (b)                     GAS      0.02  0.00  0.00  1289.  69.
  11.70  1.95  1.95     4191.      2558.      6749.    29.57    18.05    47.62
   0.296    0.180    0.476       0.000       0.000         2.527         0.689
IGCC                           10
Turbine                        11
  WUMSWICT   1312   000000 00              GAS      0.08  0.00  0.00    18.   0.
   3.00  1.03  1.03        4.         3.         7.     0.05     0.03     0.08
   0.002    0.001    0.003       0.000       0.000         0.004         0.001
  WUMSWICT   1322   000000 00              GAS      0.08  0.00  0.00  1221.   0.
   2.80  1.03  1.03       68.       189.       257.     0.74     2.07     2.81
   0.030    0.083    0.112       0.000       0.000         0.149         0.041
  WUMS  ACT  8     (b)                     GAS      0.10  0.00  0.00  2384.  53.
   7.80  2.94  2.94     2243.       972.      3214.    19.17     8.31    27.48
   0.959    0.415    1.374       0.000       0.000         1.458         0.398
Biomass                        12
  WUMS  BIOMS00  45 000000 00              B1-: 0.6 0.02  0.08  0.57    12.   0.
  44.80  5.36  5.36       52.        40.        92.     0.42     0.32     0.74
   0.004    0.003    0.007       0.030       0.000         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  WUMS  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    14.   0.
  78.60 10.48 10.48       63.        48.       110.     0.85     0.65     1.51
   0.105    0.080    0.185       0.000       0.000         0.000         0.000
```

```
  WUMS  LG   0     (a)                      WASTE    0.25  0.00  0.00    30. 176.
  78.60 10.48 10.48      132.        95.       226.     1.32     0.95     2.26
   0.162    0.117    0.279       0.000       0.000         0.000         0.000
Wind                            15
  WUMS  WIND 00     000000 00               NONE     0.00  0.00 71.00    13.   0.
  26.40  0.00  0.00        20.        11.        32.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
  WUMSWICGCOU1211162050710 01               SB2: 6.5 0.37  1.00  6.48    11.   0.
  11.70  1.54  1.54        45.        36.        80.     0.36     0.29     0.65
   0.066    0.054    0.120       0.323       0.002         0.062         0.017
  WUMSWICGCOU1311162050710 01               SB2: 6.5 0.37  1.00  6.48     4.   0.
  32.00  1.54  1.54        16.        13.        29.     0.15     0.12     0.27
   0.028    0.023    0.051       0.136       0.001         0.026         0.007
Cgn_Gas                         23
Cgn_Oil                         24
Cgn_Other                       25
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
  WUMSWITSCSU1242162020110 01     SCR1     SB2: 6.5 0.05  0.71  6.29   377.   7.
  22.80  2.41  2.41      1567.      1244.      2811.    16.93    13.45    30.37
   0.423    0.336    0.759      10.813       0.095         2.931         0.799
  WUMSWITSCSU1341161010110 01     SCR2     SB2: 6.5 0.05  1.00  6.29   342.   9.
  26.90  2.47  2.47      1419.      1127.      2547.    13.65    10.84    24.50
   0.341    0.271    0.612      12.248       0.077         2.363         0.645
Ret.ExistScrub & SCR            41
Ret.SNCR                        42
  WUMSWITSGBU1232392020310 01     SNR1     BB2: 4.1 0.31  1.00  0.45   280.   4.
  26.90  2.38  2.38       747.       593.      1340.     8.74     6.94    15.68
   1.332    1.058    2.391       7.838       0.004         1.460         0.398
Ret.ExistScrub & SNCR           43
  WUMSWITCOLS1231391020104 01     HNO1     BD1: 5.1 0.52  0.57  3.24    80.   3.
  43.30  3.86  3.86       278.       169.       448.     2.89     1.76     4.66
   0.752    0.458    1.210       1.327       0.008         0.434         0.118
Ret.SCR+Scrb                    44
  WUMSWITSCSU1242162020110 01     RD01     SB2: 6.5 0.05  0.10  4.21   706.  26.
  28.48  4.58  4.58      2931.      2328.      5260.    32.34    25.69    58.03
   0.809    0.642    1.451       2.901       0.122         5.599         1.527
  WUMSWITSDBU1241162020110 01     RL02     SD2: 6.7 0.05  0.06  2.28   539.  37.
  43.99  3.41  3.41      2237.      1777.      4014.    20.33    16.14    36.47
   0.508    0.404    0.912       1.021       0.042         3.519         0.960
  WUMSWITSCSU1242162020110 01     SCR1LD01 SB2: 6.5 0.05  0.10  4.21    99.  26.
  28.49  4.58  4.58       410.       326.       737.     4.53     3.60     8.13
   0.113    0.090    0.203       0.406       0.017         0.784         0.214
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
```

```
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: MANO     (Emissions By Plant)
--------------------------------------------------
```

	NOx			SO2	MER	CO2	Carbon
			Generation			Trillion	
	Emission		Emission	Emission		Emission	Emission
						(lb/MBtu)	(lb/TBtu)	(MW)	$
/KWyr	VOM Mill/KWh		(GWh)			(Btu)	
	(1000 Tons)		(1000 Tons)	(Tons)		(Mil Tonnes)	(Mil Tonnes)
Unit					Fuel	NOx	SO2 MERCURY Cap.	Cap
.	FO&M WINT. SUMM.	WINTER	SUMMER	Total	WINTER	SUMMER	Total
	WINTER SUMMER	Total	Total	Total	Total	Total
Scrubbed Coal_NOx			1				
MANO	TCOLA0411182020105 01			BG1: 8.0	0.01	0.25	0.80	18.	0.
23.60	3.91	3.91	75.	59.	134.	0.67	0.53	1.21
0.004	0.003	0.007	0.151	0.000	0.112	0.031
MANO	TCOLD0431182050307 01			BG1: 8.0	0.28	0.25	0.24	42.	0.
23.30	3.85	3.85	174.	138.	313.	1.81	1.44	3.25
0.253	0.201	0.454	0.407	0.000	0.303	0.083
Scrubbed Coal			2				
MANO	TOLBS0432191010103 01			BG1: 8.0	0.51	0.25	3.70	86.	0.
42.70	2.94	2.94	357.	283.	640.	3.98	3.16	7.15
1.016	0.807	1.822	0.893	0.013	0.666	0.182
MANO	TOLBS0432192010203 01			BG1: 8.0	0.47	0.25	4.66	88.	0.
42.70	2.94	2.94	365.	290.	655.	4.08	3.24	7.33

```
   0.953    0.757    1.711       0.916       0.017         0.682         0.186
  MANOILTSGBS0412191020703 01              BG1: 8.0 0.97  5.04  4.66    22.   0.
  43.00  2.94  2.94       91.        73.       164.     1.08     0.86     1.93
   0.522    0.415    0.937       4.871       0.005         0.180         0.049
Unscrubbed Coal_NOx            3
  MANO  TSCSO0441182010102 01              SB2: 6.5 0.30  0.68  6.29   292.   0.
  32.30  1.54  1.54     1212.       806.      2018.    11.83     7.87    19.71
   1.745    1.161    2.907       6.700       0.062         1.901         0.519
Unscrubbed Coal                4
  MANOMOTCOLU0511282050710 01              SD2: 6.7 0.48  1.40  6.70    17.   0.
  32.00  1.54  1.54       71.        56.       127.     0.73     0.58     1.32
   0.175    0.139    0.315       0.922       0.004         0.127         0.035
  MANOMOTOLBU0532281010110 01              BB2: 4.1 0.62  1.00  2.62    49.   0.
  32.00  1.54  1.54      170.       135.       306.     1.86     1.48     3.34
   0.575    0.457    1.032       1.672       0.004         0.311         0.085
  MANOMOTSABU0541252020110 01              SB2: 6.5 0.22  1.00  6.29  1158.   0.
  26.40  1.54  1.54     4512.      3197.      7709.    45.99    32.59    78.57
   5.013    3.552    8.565      39.287       0.247         7.581         2.067
  MANO  TSASU0441202020110 01              SB2: 6.5 0.29  0.68  6.29   169.   0.
  32.00  1.54  1.54      588.       467.      1054.     6.16     4.89    11.04
   0.886    0.704    1.590       3.755       0.035         1.066         0.291
  MANO  TSBSU0432172010110 01              SB1: 4.5 0.37  0.69  4.41   100.   0.
  32.00  1.54  1.54      348.       212.       560.     4.00     2.44     6.43
   0.742    0.452    1.194       2.213       0.014         0.621         0.169
  MANO  TSBSU0441172020110 01              SB1: 4.5 0.31  0.72  4.41  2672.   0.
  32.00  1.54  1.54    11089.      8039.     19129.   107.18    77.70   184.88
  16.720   12.121   28.841      66.834       0.408        17.837         4.865
  MANO  TSBSU0441172020210 01              SB1: 4.5 0.30  0.69  4.28   579.   0.
  32.00  1.54  1.54     2403.      1908.      4311.    23.11    18.36    41.47
   3.501    2.781    6.282      14.368       0.089         4.001         1.091
  MANO  TSCSU0441202020110 01              SB2: 6.5 0.27  0.68  6.29   676.   0.
  32.00  1.54  1.54     2350.      1866.      4217.    24.07    19.12    43.19
   3.214    2.553    5.766      14.686       0.136         4.167         1.137
  MANO  TSCSU0442202020110 01              SB2: 6.5 0.27  0.68  6.29   169.   0.
  32.00  1.54  1.54      588.       467.      1054.     6.25     4.97    11.22
   0.844    0.670    1.515       3.815       0.035         1.082         0.295
  MANOMOTSDBU0541252020110 01              BB2: 4.1 0.20  1.00  2.62  2300.   0.
  26.40  1.54  1.54     9545.      6350.     15896.    98.30    65.40   163.69
  10.026    6.670   16.697      81.847       0.215        15.244         4.157
  MANO  TSESU0441172020310 01              SB1: 4.5 0.32  0.68  1.23   187.   0.
  32.00  1.54  1.54      776.       616.      1392.     7.32     5.81    13.14
   1.175    0.933    2.108       4.440       0.008         1.267         0.346
  MANOMOTSGBU0511271040310 01              BB2: 4.1 0.52  1.00  0.45    14.   0.
  32.00  1.54  1.54       58.        46.       104.     0.58     0.46     1.05
   0.153    0.121    0.274       0.523       0.000         0.097         0.027
  MANOMOTSGBU0511272020710 01              BB2: 4.1 0.27  1.00  4.10     2.   0.
  32.00  1.54  1.54        8.         7.        15.     0.08     0.07     0.15
   0.011    0.009    0.020       0.075       0.000         0.014         0.004
  MANOMOTSGBU0531272040310 01              BB2: 4.1 0.49  1.00  0.45    57.   0.
  32.00  1.54  1.54      237.       157.       394.     2.38     1.58     3.96
   0.581    0.387    0.968       1.979       0.001         0.368         0.100
  MANO  TSJBU0432252020210 01              BB2: 4.1 0.38  1.00  3.69    96.   0.
  32.00  1.54  1.54      334.       265.       599.     3.58     2.84     6.42
   0.671    0.533    1.203       3.209       0.012         0.598         0.163
  MANO  TSJBU0441252020110 01              BB2: 4.1 0.35  1.00  2.62   372.   0.
  32.00  1.54  1.54     1544.      1027.      2571.    15.41    10.25    25.66
   2.735    1.820    4.555      12.832       0.034         2.390         0.652
  MANO  TSJBU0441252020210 01              BB2: 4.1 0.30  1.00  3.69   428.   0.
  22.40  1.54  1.54     1776.      1182.      2958.    18.73    12.46    31.19
   2.809    1.869    4.678      15.595       0.058         2.904         0.792
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  MANO  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1072.   0.
 234.60  1.32  1.32     4576.      3932.      8508.    45.89    39.44    85.33
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1182.   0.
 141.60  0.51  0.51     5678.      4336.     10014.    58.45    44.64   103.09
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1175.   0.
 141.60  0.51  0.51     5619.      4310.      9929.    57.84    44.37   102.22
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1255.   0.
 138.40  0.50  0.50     6027.      4240.     10267.    62.68    44.09   106.77
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1222.   0.
 138.40  0.50  0.50     5908.      4231.     10139.    60.21    43.12   103.33
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1128.   0.
 162.50  0.78  0.78     5556.      4088.      9644.    58.81    43.27   102.08
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1131.   0.
 162.50  0.78  0.78     5173.      4145.      9318.    55.44    44.41    99.85
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1154.   0.
 137.60  0.57  0.57     5407.      3869.      9276.    56.56    40.47    97.03
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   850.   0.
 196.50  0.86  0.86     4010.      2887.      6897.    44.66    32.16    76.82
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   855.   0.
 188.00  0.94  0.94     3835.      3086.      6921.    41.98    33.78    75.76
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   855.   0.
 188.00  0.94  0.94     3694.      2914.      6608.    40.51    31.95    72.47
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MANO  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   850.   0.
 196.50  0.86  0.86     3979.      2416.      6395.    44.22    26.85    71.07
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  MANO  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   362.   0.
  15.50  0.00  0.00     1079.       747.      1826.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  MANO  CC   0413   000000 00              GAS      0.10  0.00  0.00    20.   0.
  13.90  0.00  1.03        0.        10.        10.     0.00     0.11     0.11
   0.000    0.006    0.006       0.000       0.000         0.006         0.002
  MANO  CC   0422   000000 00              GAS      0.02  0.00  0.00  3078.   0.
  13.90  1.03  1.03     6206.      4761.     10967.    46.55    35.70    82.25
   0.465    0.357    0.822       0.000       0.000         4.365         1.190
  MANOMOCC   0522   000000 00              GAS      0.02  0.00  0.00   260.   0.
  13.90  1.03  1.03      524.       402.       926.     3.93     3.02     6.95
   0.039    0.030    0.069       0.000       0.000         0.369         0.101
IGCC                           10
Turbine                        11
  MANO  CT   0411   000000 00              GAS      0.10  0.00  0.00     3.   0.
  11.20  1.03  1.03        2.         2.         4.     0.02     0.01     0.03
   0.001    0.001    0.002       0.000       0.000         0.002         0.000
  MANO  CT   0412   000000 00              GAS      0.09  0.00  0.00   191.   0.
   3.50  0.00  1.03        0.        99.        99.     0.00     1.05     1.05
   0.000    0.049    0.049       0.000       0.000         0.056         0.015
  MANO  CT   0422   000000 00              GAS      0.08  0.00  0.00  9496.   0.
   2.90  0.00  1.03        0.      1766.      1766.     0.00    19.29    19.29
   0.000    0.791    0.791       0.000       0.000         1.024         0.279
  MANOMOCT   0512   000000 00              GAS      0.10  0.00  0.00    37.   0.
   9.00  1.03  1.03        9.        19.        28.     0.09     0.20     0.29
   0.004    0.010    0.014       0.000       0.000         0.015         0.004
  MANO  ACT  8     (b)                     GAS      0.10  0.00  0.00  3251.  53.
   7.80  2.94  2.94     2289.      1650.      3938.    19.57    14.10    33.67
   0.978    0.705    1.684       0.000       0.000         1.787         0.487
```

```
Biomass                        12
  MANO  BIOMS00  45 000000 00              B1-: 0.6 0.02  0.08  0.57     1.   0.
  44.80  5.36  5.36        4.         3.         8.     0.03     0.03     0.06
   0.000    0.000    0.001       0.002       0.000         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  MANO  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    38.   0.
  78.60 10.48 10.48      170.       130.       300.     2.32     1.77     4.09
   0.285    0.218    0.503       0.000       0.000         0.000         0.000
Wind                           15
  MANO  WIND 00     000000 00              NONE     0.00  0.00 71.00    52.   0.
  26.40  0.00  0.00       88.        49.       137.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  MANO  OTHER00     000000 00              NONE     0.00  0.00  0.00    21.   0.
 103.60  0.00  0.00       93.        73.       166.     1.02     0.80     1.82
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                   19
  MANO  WASTE041    000000 00              WASTE    0.42  0.00  0.00     2.   0.
 108.60  0.00  0.00        9.         7.        16.     0.10     0.08     0.17
   0.020    0.016    0.036       0.000       0.000         0.000         0.000
Pump Storage                   20
  MANO  PUMPS00     000000 00              NONE     0.00  0.00 71.00   350.   0.
   6.50  0.00  0.00      197.       142.       339.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
  MANO  CGCT 0412   000000 00              GAS      0.10  0.00  0.00     8.   0.
   2.80  1.03  1.03        2.         4.         6.     0.02     0.04     0.06
   0.001    0.002    0.003       0.000       0.000         0.003         0.001
  MANO  CGCC 0412   000000 00              GAS      0.02  0.00  0.00     7.   0.
  13.90  1.03  1.03       14.        11.        25.     0.11     0.08     0.19
   0.001    0.001    0.002       0.000       0.000         0.010         0.003
  MANO  CGCC 0413   000000 00              GAS      0.10  0.00  0.00     1.   0.
  19.90  1.03  1.03        1.         1.         1.     0.01     0.00     0.01
   0.000    0.000    0.001       0.000       0.000         0.001         0.000
  MANO  CGCC 0422   000000 00              GAS      0.02  0.00  0.00    40.   0.
  13.90  1.03  1.03       81.        62.       143.     0.60     0.46     1.07
   0.006    0.005    0.011       0.000       0.000         0.057         0.015
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
  MANO  TCOLU0442192020110 01     ML01     BF1: 6.8 0.22  0.12  2.32   100.  46.
  48.69  2.65  2.65      414.       329.       744.     4.77     3.79     8.57
   0.523    0.415    0.938       0.514       0.010         0.798         0.218
  MANO  TSXBU0441192020110 01     LO01     BG1: 8.0 0.29  0.25  2.73   227.  30.
  38.09  2.93  2.93      943.       749.      1692.     9.34     7.42    16.75
   1.368    1.087    2.455       2.094       0.023         1.560         0.426
  MANO  TSXBU0441192020110 01     ML02     BF1: 6.8 0.29  0.12  2.32   431.  28.
  38.19  2.52  2.52     1787.      1420.      3207.    17.70    14.06    31.76
   2.593    2.060    4.653       1.906       0.037         2.958         0.807
```

```
Ret.ExistSCR & Scrub          38
  MANO  TSEBC0441181010101 01     LO01     BG1: 8.0 0.07  0.25  0.80   542.  23.
  35.68  3.95  3.95     2251.      1788.      4039.    23.53    18.69    42.22
   0.859    0.682    1.541       5.277       0.017         3.931         1.072
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
  MANO  TSESU0441172010110 01     SCR1     SB1: 4.5 0.05  0.76  4.41   303.   9.
  32.50  2.49  2.49     1258.       999.      2256.    11.72     9.31    21.03
   0.293    0.233    0.526       7.983       0.046         2.029         0.553
Ret.ExistScrub & SCR          41
  MANO  TSXBS0441191020103 01     SCR2     BE1: 6.1 0.06  0.37  0.61   366.   8.
  43.20  3.86  3.86     1519.      1206.      2725.    15.22    12.09    27.30
   0.479    0.381    0.860       5.046       0.008         2.543         0.693
  MANO  TSXBS0441192020103 01     SCR1     BG1: 8.0 0.05  0.25  0.80   190.  10.
  41.20  3.95  3.95      789.       626.      1415.     8.32     6.61    14.93
   0.208    0.165    0.373       1.867       0.006         1.391         0.379
  MANO  TSYBS0441191010103 01     SCR2     BE1: 6.1 0.06  0.44  0.61   170.  11.
  41.20  3.96  3.96      706.       560.      1266.     7.41     5.88    13.29
   0.215    0.171    0.385       2.924       0.004         1.238         0.338
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  MANO  TSCSU0441182010110 01     RL01     BF1: 6.8 0.05  0.12  0.68   978.  35.
  39.70  3.53  3.53     4059.      3224.      7283.    42.26    33.56    75.82
   1.056    0.839    1.896       4.549       0.026         7.061         1.926
  MANO  TSCSU0442182010110 01     RO01     BG1: 8.0 0.05  0.25  0.80   685.  39.
  37.47  3.98  3.98     2844.      2259.      5103.    31.71    25.18    56.89
   0.793    0.630    1.422       7.112       0.023         5.298         1.445
  MANOILTSDBU0441191020110 01     SL02     BE1: 6.1 0.06  0.09  0.61   353.  35.
  37.37  3.44  3.44     1467.      1165.      2632.    14.45    11.47    25.92
   0.455    0.361    0.816       1.140       0.008         2.414         0.658
  MANOILTSDBU0441192020110 01     RL01     BE1: 6.1 0.05  0.09  0.61   257.  34.
  37.77  3.50  3.50     1065.       845.      1910.    10.84     8.61    19.45
   0.271    0.215    0.486       0.856       0.006         1.811         0.494
  MANO  TSEBU0442181010110 01     SO01     BG1: 8.0 0.07  0.25  0.80   542.  31.
  41.29  3.90  3.90     2251.      1788.      4039.    24.50    19.46    43.95
   0.894    0.710    1.604       5.494       0.018         4.093         1.116
  MANO  TSKBU0441182020110 01     RO01     BG1: 8.0 0.05  0.25  0.80   583.  29.
  35.17  3.75  3.75     2418.      1920.      4338.    22.79    18.10    40.90
   0.570    0.453    1.022       5.112       0.016         3.809         1.039
  MANO  TSABU0441182020110 01     LO01SCR1 BG1: 8.0 0.05  0.25  0.80   543.  30.
  31.28  3.77  3.77     2255.      1791.      4046.    21.58    17.14    38.72
   0.539    0.428    0.968       4.840       0.016         3.605         0.983
  MANOILTSBBU0441181010110 01     SCR2ML02 BE1: 6.1 0.06  0.09  0.61   294.  33.
  38.62  3.43  3.43     1221.       970.      2191.    12.31     9.78    22.10
   0.382    0.303    0.685       0.972       0.007         2.058         0.561
  MANOILTSBBU0441181010110 01     ML02SCR2 BE1: 6.1 0.06  0.09  0.61   587.  33.
  38.61  3.43  3.43     2436.      1934.      4370.    24.56    19.51    44.07
   0.761    0.605    1.366       1.939       0.013         4.104         1.119
  MANOMOTSFBU0542251010110 01     SCR2LO01 BG1: 8.0 0.08  0.25  0.80   932.  34.
  39.03  3.94  3.94     3868.      3072.      6940.    42.70    33.91    76.61
   1.644    1.306    2.950       9.577       0.031         7.134         1.946
  MANOILTSHBU0441192020110 01     LO01SCR1 BG1: 8.0 0.05  0.25  0.80   421.  48.
  45.59  3.88  3.88     1747.      1388.      3135.    16.60    13.18    29.78
   0.415    0.330    0.744       3.722       0.012         2.773         0.756
  MANO  TSKBU0441181010110 01     LO01SCR2 BG1: 8.0 0.08  0.25  0.80  1132.  30.
  35.37  3.85  3.85     4697.      3730.      8427.    48.51    38.53    87.05
   1.989    1.580    3.569      10.881       0.035         8.106         2.211
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
```

```
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------
Year: 2020, Region: MAPP     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  MAPP  TCOLS1111252020203 01              BE1: 6.1 0.46  0.52  3.53    76.   0.
  43.00  2.94  2.94      315.       251.       566.     3.28     2.61     5.89
   0.754    0.599    1.354       1.534       0.010         0.548         0.149
  MAPP  TSWLS0732312030103 02              LF2: 9.8 0.35  0.60  6.07    74.   0.
  43.00  2.94  2.94      257.       204.       462.     3.42     2.72     6.14
   0.596    0.473    1.069       1.843       0.019         0.600         0.164
  MAPP  TSEBS1142252020103 01              BD1: 5.1 0.32  0.45  1.72   217.   0.
  43.00  2.94  2.94      901.       599.      1500.     9.61     6.40    16.01
   1.557    1.036    2.593       3.638       0.014         1.491         0.407
  MAPP  TSISS1141262020703 01              SB1: 4.5 0.30  0.46  3.18   350.   0.
  42.70  2.94  2.94     1453.      1154.      2606.    15.38    12.21    27.59
   2.306    1.832    4.138       6.304       0.044         2.662         0.726
  MAPP  TSXBS1142272020103 01              BD1: 5.1 0.30  0.09  1.72   161.   0.
  40.60  2.94  2.94      668.       531.      1199.     7.20     5.72    12.91
   1.080    0.857    1.937       0.591       0.011         1.202         0.328
  MAPPNDTSXLS0732312020304 02              LF2: 9.8 0.40  0.58  9.79    69.   0.
```

```
  40.60  2.94  2.94      286.       227.       514.     3.11     2.47     5.57
   0.621    0.494    1.115      1.617      0.027         0.545         0.149
  MAPPNDTSXLS0741311020103 02              LF2: 9.8 0.40  1.15  5.48   604.   0.
  40.60  2.94  2.94     2507.      1668.      4174.    26.07    17.34    43.41
   5.214    3.469    8.683     24.928      0.119         4.242         1.157
  MAPPNDTSXLS0742311010103 02              LF2: 9.8 0.86  0.52  5.68   420.   0.
  42.70  2.94  2.94     1743.      1384.      3127.    20.22    16.06    36.28
   8.694    6.905   15.600      9.521      0.103         3.545         0.967
  MAPPNDTSXLS0742312010304 02              LF2: 9.8 0.86  0.70  8.91   421.   0.
  40.60  2.94  2.94     1747.      1162.      2910.    19.86    13.21    33.08
   8.541    5.682   14.223     11.607      0.147         3.232         0.881
  MAPPNDTSXLS0742312020304 02              LF2: 9.8 0.32  0.28  9.79   900.   0.
  40.60  2.94  2.94     3735.      2967.      6702.    40.90    32.48    73.38
   6.502    5.164   11.667     10.427      0.359         7.169         1.955
  MAPP  TSYSS1142262020203 01              SD1: 4.4 0.29  0.10  3.52   535.   0.
  40.60  2.94  2.94     2220.      1763.      3984.    24.03    19.09    43.12
   3.461    2.749    6.209      2.234      0.076         4.160         1.135
  MAPP  TSYSS1142262020703 01              SD1: 4.4 0.24  0.11  3.08  1424.   0.
  42.70  2.94  2.94     5910.      4694.     10604.    62.99    50.03   113.02
   7.622    6.054   13.676      6.488      0.174        10.904         2.974
  MAPPWYTSZLS0841322020103 01              SE1: 5.5 0.35  0.05  4.65   550.   0.
  40.60  2.94  2.94     2283.      1813.      4095.    23.92    19.00    42.92
   4.187    3.325    7.512      1.037      0.100         4.141         1.129
  MAPP  TSASS0732312020703 01              SB1: 4.5 0.40  0.24  3.18    44.   0.
  43.00  2.94  2.94      183.       145.       328.     2.36     1.87     4.23
   0.472    0.375    0.847      0.512      0.007         0.408         0.111
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  MAPP  TCOLU0711312050710 01              SB2: 6.5 0.47  1.00  6.48    20.   0.
  25.80  1.54  1.54       83.        66.       149.     0.86     0.69     1.55
   0.203    0.161    0.364      0.774      0.005         0.149         0.041
  MAPP  TCOLU0731311040110 01              BB2: 4.1 0.60  1.00  2.67    28.   0.
  32.00  1.54  1.54      116.        92.       208.     1.21     0.96     2.17
   0.363    0.288    0.651      1.084      0.003         0.202         0.055
  MAPP  TCOLU1111261040110 01              BB2: 4.1 0.60  1.00  2.67    14.   0.
  22.40  1.54  1.54       58.        46.       104.     0.60     0.48     1.08
   0.181    0.144    0.325      0.542      0.001         0.101         0.028
  MAPP  TCOLU1111271040210 01              BG1: 8.0 0.60  5.00  8.04    19.   0.
  32.00  1.54  1.54       79.        63.       141.     0.82     0.65     1.47
   0.246    0.195    0.441      3.678      0.006         0.137         0.037
  MAPP  TCOLU1111261040310 01              BB2: 4.1 0.60  0.72  0.45     8.   0.
  32.00  1.54  1.54       33.        26.        60.     0.35     0.27     0.62
   0.104    0.082    0.186      0.223      0.000         0.058         0.016
  MAPP  TCOLU1111252020110 01              BG1: 8.0 0.46  5.00  5.15    31.   0.
  32.00  1.54  1.54      129.       102.       231.     1.34     1.06     2.40
   0.308    0.244    0.552      6.002      0.006         0.224         0.061
  MAPP  TCOLU1111262050710 01              BB2: 4.1 0.40  1.00  4.10   103.   0.
  32.00  1.54  1.54      427.       340.       767.     4.45     3.53     7.98
   0.891    0.708    1.599      3.988      0.016         0.743         0.203
  MAPP  TCOLU1131261040110 01              BB2: 4.1 0.60  1.00  2.67    37.   0.
  22.40  1.54  1.54      129.       102.       231.     1.34     1.06     2.40
   0.401    0.319    0.720      1.200      0.003         0.224         0.061
  MAPP  TCOLU1131262020110 01              BB2: 4.1 0.46  1.00  2.62    47.   0.
  32.00  1.54  1.54      195.       130.       325.     2.03     1.35     3.38
   0.467    0.310    0.777      1.689      0.004         0.315         0.086
  MAPP  TCOLU1131272020110 01              BB2: 4.1 0.46  1.00  2.62    62.   0.
  32.00  1.54  1.54      216.       171.       387.     2.24     1.78     4.02
   0.516    0.409    0.925      2.011      0.005         0.375         0.102
  MAPP  TCOLU1131252020210 01              BB2: 4.1 0.46  1.00  3.69    73.   0.
  32.00  1.54  1.54      254.       202.       455.     2.64     2.10     4.74
   0.607    0.482    1.089      2.368      0.009         0.441         0.120
  MAPP  TCOLU1131262020310 01              BB2: 4.1 0.46  1.00  0.45   150.   0.
  32.00  1.54  1.54      623.       414.      1037.     6.47     4.31    10.78
   1.489    0.991    2.480      5.391      0.002         1.004         0.274
  MAPPWITCOLU1311161010710 01              SB2: 6.5 0.86  1.00  6.48    24.   0.
```

32.00 1.54 1.54 100. 79. 179. 1.04 0.82 1.86
0.445 0.354 0.799 0.929 0.006 0.179 0.049
MAPPWITCOLU1311162020110 01 SD2: 6.7 0.46 1.40 6.50 63. 0.
32.00 1.54 1.54 261. 208. 469. 2.72 2.16 4.88
0.625 0.497 1.122 3.415 0.016 0.471 0.128
MAPPWITCOLU1311162040210 01 SB2: 6.5 0.37 1.00 6.48 49. 0.
32.00 1.54 1.54 203. 162. 365. 2.11 1.68 3.79
0.393 0.312 0.706 1.897 0.012 0.366 0.100
MAPP TOLBU1141252020110 01 BB2: 4.1 0.34 1.00 2.62 130. 0.
32.00 1.54 1.54 540. 359. 898. 5.66 3.77 9.43
0.966 0.642 1.608 4.716 0.012 0.878 0.240
MAPPMOTOLBU0512282020110 01 SD2: 6.7 0.42 1.40 6.50 21. 0.
32.00 1.54 1.54 87. 69. 156. 0.96 0.76 1.72
0.203 0.161 0.364 1.206 0.006 0.166 0.045
MAPPMOTOLBU0532281010110 01 BB2: 4.1 0.54 1.00 2.62 97. 0.
32.00 1.54 1.54 337. 268. 605. 3.76 2.98 6.74
1.024 0.813 1.837 3.370 0.009 0.628 0.171
MAPP TSABU1141282010210 01 BB2: 4.1 0.44 1.00 3.69 135. 0.
32.00 1.54 1.54 560. 373. 933. 5.90 3.93 9.83
1.310 0.872 2.182 4.914 0.018 0.915 0.250
MAPP TSABU1142282020110 01 BB2: 4.1 0.32 1.00 2.62 371. 0.
26.40 1.54 1.54 1540. 1223. 2763. 16.41 13.03 29.44
2.609 2.072 4.681 14.719 0.039 2.741 0.748
MAPPWITSASU1331162020110 01 SB2: 6.5 0.41 1.00 6.29 87. 0.
32.00 1.54 1.54 302. 240. 543. 3.13 2.49 5.62
0.647 0.514 1.161 2.812 0.018 0.543 0.148
MAPPWITSASU1332162020110 01 SB2: 6.5 0.41 1.00 6.29 57. 0.
32.00 1.54 1.54 198. 121. 319. 2.17 1.32 3.50
0.448 0.273 0.722 1.748 0.011 0.337 0.092
MAPP TSBBU1112271020710 01 BG1: 8.0 0.95 5.00 8.04 23. 0.
32.00 1.54 1.54 95. 76. 171. 1.15 0.92 2.07
0.546 0.434 0.980 5.181 0.008 0.193 0.053
MAPP TSBBU1112272040210 01 BB2: 4.1 0.47 1.00 4.10 36. 0.
32.00 1.54 1.54 149. 119. 268. 1.94 1.54 3.48
0.456 0.363 0.819 1.742 0.007 0.325 0.089
MAPP TSBBU1131262020110 01 BB2: 4.1 0.42 1.00 2.62 29. 0.
26.40 1.54 1.54 120. 80. 200. 1.20 0.80 2.00
0.250 0.167 0.417 0.998 0.003 0.186 0.051
MAPP TSBBU1131262020210 01 BB2: 4.1 0.41 1.00 3.69 60. 0.
26.40 1.54 1.54 209. 166. 374. 2.19 1.74 3.93
0.446 0.354 0.800 1.965 0.007 0.366 0.100
MAPPNETSBBU1432282020210 01 BB2: 4.1 0.22 0.75 3.69 85. 0.
26.40 1.54 1.54 353. 280. 633. 3.96 3.14 7.10
0.438 0.348 0.785 2.657 0.013 0.662 0.180
MAPPNETSBBU1441282010310 01 BB2: 4.1 0.85 0.67 0.45 120. 0.
32.00 1.54 1.54 498. 396. 894. 5.20 4.13 9.33
2.205 1.751 3.955 3.102 0.002 0.869 0.237
MAPPNETSBBU1442282010310 01 BB2: 4.1 0.88 0.67 0.45 105. 0.
26.40 1.54 1.54 436. 346. 782. 4.90 3.89 8.79
2.153 1.710 3.863 2.940 0.002 0.819 0.223
MAPPNETSBSU1432282020110 01 SB2: 6.5 0.40 1.00 6.29 76. 0.
32.00 1.54 1.54 315. 210. 525. 3.70 2.46 6.17
0.741 0.493 1.233 3.083 0.019 0.595 0.162
MAPPNETSBSU1432282020210 01 SB2: 6.5 0.38 0.70 6.09 172. 0.
22.40 1.54 1.54 714. 567. 1281. 7.94 6.31 14.25
1.509 1.198 2.707 4.952 0.043 1.375 0.375
MAPPNETSBSU1441282020110 01 SB2: 6.5 0.46 1.00 6.29 585. 0.
22.40 1.54 1.54 2428. 1928. 4356. 25.11 19.95 45.06
5.776 4.588 10.364 22.530 0.142 4.347 1.186
MAPPNETSBSU1441282020210 01 SB2: 6.5 0.46 0.65 6.09 700. 0.
22.40 1.54 1.54 2905. 2307. 5212. 27.57 21.90 49.47
6.341 5.036 11.377 16.151 0.151 4.772 1.302
MAPPNETSBSU1442282020110 01 SB2: 6.5 0.42 1.00 6.29 569. 0.
29.90 1.54 1.54 2361. 1876. 4237. 26.05 20.69 46.75
5.510 4.376 9.887 23.373 0.147 4.510 1.230

```
  MAPPNETSBSU1442282020510 01                SB2: 6.5 0.46  0.66  1.75   665.   0.
  22.40  1.54  1.54     2760.      2192.      4952.    29.81    23.68    53.48
   6.856    5.445   12.301      17.543       0.047         5.160         1.407
  MAPP  TSCBU1131272010110 01                BB2: 4.1 0.39  1.00  2.62    80.   0.
  32.00  1.54  1.54      332.       221.       553.     3.33     2.21     5.54
   0.644    0.428    1.072       2.770       0.007         0.516         0.141
  MAPP  TSCBU1131252020110 01                BB2: 4.1 0.44  1.00  2.62    34.   0.
  32.00  1.54  1.54      118.        94.       212.     1.23     0.98     2.21
   0.272    0.216    0.489       1.103       0.003         0.205         0.056
  MAPP  TSCSU1141252020210 01                SB2: 6.5 0.30  0.72  6.09   644.   0.
  22.40  1.54  1.54     2673.      1778.      4451.    27.92    18.58    46.50
   4.118    2.740    6.858      16.786       0.142         4.486         1.223
  MAPP  TSCSU1142252020210 01                SB2: 6.5 0.30  0.71  6.09   260.   0.
  26.40  1.54  1.54      904.       551.      1455.    10.51     6.41    16.92
   1.577    0.961    2.537       6.039       0.052         1.632         0.445
  MAPPWITSCSU1342162020210 01                SB2: 6.5 0.31  0.66  6.09   377.   0.
  22.40  1.54  1.54     1565.      1243.      2807.    17.36    13.79    31.15
   2.647    2.103    4.750      10.200       0.095         3.005         0.820
  MAPP  TSDSU1132252020110 01                SB2: 6.5 0.35  0.43  6.29    30.   0.
  26.40  1.54  1.54      104.        83.       187.     1.22     0.96     2.18
   0.213    0.169    0.383       0.472       0.007         0.210         0.057
  MAPP  TSDSU1132252020210 01                SB2: 6.5 0.33  0.66  6.09    88.   0.
  32.00  1.54  1.54      306.       243.       549.     3.40     2.70     6.09
   0.569    0.452    1.021       2.017       0.019         0.588         0.160
  MAPP  TSEBU1141252020110 01                BB2: 4.1 0.30  1.00  2.62   211.   0.
  26.40  1.54  1.54      876.       583.      1458.     9.08     6.04    15.11
   1.352    0.900    2.252       7.557       0.020         1.408         0.384
  MAPP  TSGBU1132271010110 01                BB2: 4.1 0.53  1.00  2.62    76.   0.
  26.40  1.54  1.54      264.       161.       425.     2.87     1.75     4.62
   0.753    0.459    1.213       2.310       0.006         0.430         0.117
  MAPP  TSGBU1132272020110 01                BB2: 4.1 0.45  1.00  2.62    39.   0.
  32.00  1.54  1.54      136.        83.       218.     1.52     0.92     2.44
   0.341    0.208    0.549       1.220       0.003         0.227         0.062
  MAPP  TSGBU1132272020210 01                BB2: 4.1 0.43  1.00  3.69    78.   0.
  29.40  1.54  1.54      271.       165.       436.     3.05     1.86     4.90
   0.652    0.397    1.049       2.451       0.009         0.456         0.124
  MAPP  TSGBU1141272020210 01                BB2: 4.1 0.32  1.00  3.69   142.   0.
  32.00  1.54  1.54      589.       392.       981.     6.01     4.00    10.01
   0.968    0.644    1.611       5.004       0.018         0.932         0.254
  MAPP  TSISU1132262020110 01                SB1: 4.5 0.34  0.53  4.41   242.   0.
  32.00  1.54  1.54     1004.       668.      1673.    11.68     7.77    19.46
   1.986    1.321    3.308       5.127       0.043         1.877         0.512
  MAPP  TSISU1132262020310 01                SB1: 4.5 0.30  1.00  1.23   138.   0.
  32.00  1.54  1.54      480.       381.       861.     5.31     4.22     9.53
   0.796    0.633    1.429       4.763       0.006         0.919         0.251
  MAPP  TSISU1142262020110 01                SB1: 4.5 0.38  0.58  4.41   454.   0.
  32.00  1.54  1.54     1884.      1254.      3138.    20.80    13.84    34.64
   3.984    2.650    6.634       9.995       0.076         3.342         0.912
  MAPPWITSISU1341392020110 01                SB1: 4.5 0.31  1.00  4.41   377.   0.
  26.40  1.54  1.54     1565.      1041.      2606.    14.21     9.45    23.66
   2.209    1.470    3.679      11.829       0.052         2.283         0.623
  MAPP  TSLBU1112261020710 01                BB2: 4.1 0.81  1.00  4.10    23.   0.
  32.00  1.54  1.54       95.        76.       171.     1.12     0.89     2.00
   0.454    0.361    0.815       1.002       0.004         0.187         0.051
  MAPPNETSLBU1412281020310 01                BB2: 4.1 0.71  0.62  0.45    35.   0.
  32.00  1.54  1.54      145.       115.       261.     1.92     1.52     3.44
   0.676    0.537    1.212       1.061       0.001         0.320         0.087
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  MAPP  NUKE 00    7000000 00                NUC      0.00  0.00  0.00   561.   0.
 176.10  0.82  0.82     2709.      1660.      4369.    29.49    18.08    47.57
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00                NUC      0.00  0.00  0.00   529.   0.
  95.60  0.59  0.59     2691.      1573.      4265.    28.99    16.95    45.93
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   597.   0.
 109.60  0.70  0.70     2444.      2190.      4634.    25.55    22.89    48.44
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   530.   0.
 145.60  0.59  0.59     2459.      1545.      4004.    26.43    16.61    43.03
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   571.   0.
 232.50  1.20  1.20     2196.      2095.      4291.    23.38    22.29    45.67
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   834.   0.
 185.20  0.93  0.93     2554.      2762.      5316.    27.39    29.63    57.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  MAPP  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  3204.   0.
  15.40  0.00  0.00     5412.      4577.      9989.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  MAPP  CC   0422   000000 00              GAS      0.02  0.00  0.00   537.   0.
  13.90  1.03  1.03     1805.      1276.      3081.    13.54     9.57    23.11
   0.135    0.096    0.231       0.000       0.000         1.226         0.334
  MAPP  CC   1113   000000 00              GAS      0.16  0.00  0.00    43.   0.
  19.70  1.03  1.03       10.        22.        32.     0.11     0.24     0.35
   0.008    0.019    0.028       0.000       0.000         0.019         0.005
  MAPP  CC   1122   000000 00              GAS      0.05  0.00  0.00   451.   0.
  13.90  1.03  1.03     1456.       698.      2154.    11.44     5.48    16.92
   0.292    0.140    0.431       0.000       0.000         0.898         0.245
  MAPP  CC   1123   000000 00              GAS      0.11  0.00  0.00    89.   0.
  13.90  0.00  1.03        0.        46.        46.     0.00     0.51     0.51
   0.000    0.027    0.027       0.000       0.000         0.027         0.007
  MAPP  CC   1124   000000 00              GAS      0.16  0.00  0.00   102.   0.
  19.50  0.00  1.03        0.        17.        17.     0.00     0.22     0.22
   0.000    0.018    0.018       0.000       0.000         0.012         0.003
  MAPPNECC   1422   000000 00              GAS      0.02  0.00  0.00   118.   0.
  13.90  1.03  1.03      397.       304.       701.     2.97     2.28     5.26
   0.030    0.023    0.053       0.000       0.000         0.279         0.076
IGCC                            10
Turbine                         11
  MAPP  CT   0414   000000 00              GAS      0.12  0.00  0.00    64.   0.
  11.20  0.00  1.03        0.        11.        11.     0.00     0.16     0.16
   0.000    0.009    0.009       0.000       0.000         0.008         0.002
  MAPP  CT   0712   000000 00              GAS      0.08  0.00  0.00     2.   0.
   2.80  1.03  1.03        0.         1.         1.     0.01     0.01     0.02
   0.000    0.000    0.001       0.000       0.000         0.001         0.000
  MAPP  CT   0713   000000 00              GAS      0.10  0.00  0.00    64.   0.
  10.10  0.00  1.03        0.        11.        11.     0.00     0.15     0.15
   0.000    0.008    0.008       0.000       0.000         0.008         0.002
  MAPP  CT   0714   000000 00              GAS      0.11  0.00  0.00   114.   0.
   9.90  0.00  1.03        0.        20.        20.     0.00     0.28     0.28
   0.000    0.015    0.015       0.000       0.000         0.015         0.004
  MAPP  CT   0722   000000 00              GAS      0.10  0.00  0.00    30.   0.
   7.80  0.00  1.03        0.        16.        16.     0.00     0.18     0.18
   0.000    0.009    0.009       0.000       0.000         0.009         0.003
  MAPP  CT   1111   000000 00              GAS      0.11  0.00  0.00    64.   0.
  10.70  1.03  1.03       44.        33.        78.     0.40     0.30     0.70
   0.022    0.017    0.039       0.000       0.000         0.037         0.010
  MAPP  CT   1112   000000 00              GAS      0.09  0.00  0.00   273.   0.
   8.80  1.03  1.03       63.       141.       204.     0.67     1.51     2.18
   0.031    0.069    0.100       0.000       0.000         0.116         0.032
  MAPP  CT   1113   000000 00              GAS      0.11  0.00  0.00   144.   0.
   9.50  0.00  1.03        0.        25.        25.     0.00     0.33     0.33
   0.000    0.019    0.019       0.000       0.000         0.017         0.005
  MAPP  CT   1114   000000 00              GAS      0.11  0.00  0.00  1269.   0.
  10.30  0.00  1.03        0.        23.        23.     0.00     0.33     0.33
   0.000    0.018    0.018       0.000       0.000         0.017         0.005
```

```
  MAPP  CT   1122   000000 00              GAS      0.08  0.00  0.00  1513.   0.
   2.80  1.03  1.03       89.       783.       872.     0.98     8.58     9.56
   0.040    0.348    0.387       0.000       0.000         0.507         0.138
  MAPP  CT   1123   000000 00              GAS      0.11  0.00  0.00   934.   0.
   9.90  0.00  1.03        0.       161.       161.     0.00     2.09     2.09
   0.000    0.119    0.119       0.000       0.000         0.111         0.030
  MAPPMOCT   0513   000000 00              GAS      0.70  0.00  0.00    42.   0.
   7.80  0.00  1.03        0.         7.         7.     0.00     0.10     0.10
   0.000    0.034    0.034       0.000       0.000         0.005         0.001
  MAPPNECT   1412   000000 00              GAS      0.10  0.00  0.00    49.   0.
  10.00  1.03  1.03       34.        25.        59.     0.36     0.27     0.62
   0.018    0.014    0.032       0.000       0.000         0.033         0.009
  MAPPNECT   1413   000000 00              GAS      0.10  0.00  0.00    21.   0.
  11.20  0.00  1.03        0.         4.         4.     0.00     0.05     0.05
   0.000    0.002    0.002       0.000       0.000         0.003         0.001
  MAPPNECT   1414   000000 00              GAS      0.10  0.00  0.00   234.   0.
  10.50  0.00  1.03        0.        40.        40.     0.00     0.57     0.57
   0.000    0.029    0.029       0.000       0.000         0.030         0.008
  MAPPNECT   1422   000000 00              GAS      0.08  0.00  0.00   629.   0.
   3.20  1.03  1.03      145.       326.       471.     1.61     3.60     5.21
   0.067    0.149    0.216       0.000       0.000         0.276         0.075
  MAPPNECT   1423   000000 00              GAS      0.11  0.00  0.00   496.   0.
  10.50  0.00  1.03        0.        87.        87.     0.00     1.12     1.12
   0.000    0.063    0.063       0.000       0.000         0.059         0.016
  MAPPNECT   1424   000000 00              GAS      0.10  0.00  0.00    82.   0.
   2.80  0.00  1.03        0.        14.        14.     0.00     0.20     0.20
   0.000    0.010    0.010       0.000       0.000         0.011         0.003
  MAPPWICT   1312   000000 00              GAS      0.08  0.00  0.00    25.   0.
   3.60  1.03  1.03        6.        13.        19.     0.06     0.14     0.20
   0.003    0.006    0.008       0.000       0.000         0.010         0.003
  MAPPWICT   1313   000000 00              GAS      0.12  0.00  0.00    13.   0.
   8.80  0.00  1.03        0.         2.         2.     0.00     0.03     0.03
   0.000    0.002    0.002       0.000       0.000         0.002         0.000
  MAPPWICT   1314   000000 00              GAS      0.10  0.00  0.00    83.   0.
  10.20  0.00  1.03        0.        14.        14.     0.00     0.20     0.20
   0.000    0.011    0.011       0.000       0.000         0.011         0.003
  MAPPWICT   1322   000000 00              GAS      0.08  0.00  0.00    82.   0.
   2.80  1.03  1.03       19.        42.        61.     0.21     0.46     0.67
   0.008    0.019    0.027       0.000       0.000         0.036         0.010
  MAPPWICT   1323   000000 00              GAS      0.13  0.00  0.00   484.   0.
  11.20  0.00  1.03        0.        83.        83.     0.00     1.10     1.10
   0.000    0.070    0.070       0.000       0.000         0.058         0.016
  MAPP  ACT  8     (b)                     GAS      0.10  0.00  0.00   146.  53.
   7.80  2.94  2.94      103.        74.       177.     0.88     0.63     1.51
   0.044    0.032    0.076       0.000       0.000         0.080         0.022
Biomass                          12
  MAPP  BIOMS00  46 000000 00              B1-: 0.6 0.02  0.08  0.57   163.   0.
  44.80  5.36  5.36      706.       546.      1252.     5.72     4.42    10.14
   0.057    0.044    0.101       0.405       0.003         0.000         0.000
Geothermal                       13
Landfill Gas                     14
  MAPP  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    11.   0.
  78.60 10.48 10.48       49.        38.        87.     0.67     0.51     1.18
   0.083    0.063    0.146       0.000       0.000         0.000         0.000
Wind                             15
  MAPP  WIND 00     000000 00              NONE     0.00  0.00 71.00   857.   0.
  26.40  0.00  0.00     1443.       809.      2252.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  MAPP  WIN410     (a)                     NONE     0.00  0.00 71.00    32. 140.
  26.40  0.00  0.00       55.        28.        84.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                        16
Solar                            17
Non Fossil_Other                 18
  MAPP  OTHER00     000000 00              NONE     0.00  0.00 71.00    34.   0.
```

```
 103.60  0.00  0.00      150.       118.       268.     1.65     1.30     2.95
   0.000    0.000    0.000       0.000       0.105         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
Int. Imports                   21
  MAPP  MNIMP00     000000 00              NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00        1.         1.         2.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                       22
  MAPP  CGCOU1111262050210 01            BB2: 4.1 0.40  1.00  4.10    11.   0.
  32.00  1.54  1.54       45.        36.        80.     0.40     0.32     0.73
   0.081    0.065    0.146       0.363       0.001         0.068         0.018
  MAPP  CGCOU1111262050710 01            BB2: 4.1 0.40  1.00  4.10     1.   0.
  32.00  1.54  1.54        4.         3.         7.     0.04     0.03     0.07
   0.008    0.007    0.015       0.037       0.000         0.007         0.002
  MAPP  CGSDU1131251020210 01            BB2: 4.1 0.53  0.42  3.69    65.   0.
  22.40  1.54  1.54      263.       212.       475.     2.34     1.89     4.23
   0.617    0.498    1.115       0.882       0.008         0.394         0.107
Cgn_Gas                        23
  MAPP  CGCT 1112   000000 00              GAS      0.09  0.00  0.00    31.   0.
   2.80  1.03  1.03        7.        16.        23.     0.08     0.17     0.25
   0.003    0.007    0.011       0.000       0.000         0.013         0.004
Cgn_Oil                        24
Cgn_Other                      25
  MAPP  CGOTH00     000000 00              NONE     0.00  0.00 71.00     2.   0.
 103.60  0.00  0.00        9.         7.        15.     0.04     0.03     0.06
   0.000    0.000    0.000       0.000       0.002         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
  MAPPSDTSBLU0742261010110 02     ML02     LF2: 9.8 0.86  0.12  5.68   443.  27.
  36.27  2.64  2.64     1836.      1459.      3295.    21.20    16.84    38.04
   9.115    7.240   16.355       2.206       0.108         3.716         1.014
  MAPPNDTSELU0742312010110 02     ML02     LF2: 9.8 0.86  0.12  5.68   676.  29.
  37.37  2.64  2.64     2803.      2227.      5030.    32.17    25.55    57.72
  13.833   10.987   24.820       3.348       0.164         5.639         1.538
  MAPPNDTSELU0742312020110 02     ML01     LF2: 9.8 0.36  0.12  5.48   370.  32.
  44.69  2.62  2.62     1536.      1220.      2756.    17.08    13.56    30.64
   3.048    2.421    5.469       1.777       0.084         2.993         0.816
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  MAPP  TSABU1141282020110 01     SCR1     BB2: 4.1 0.05  1.00  2.62   924.   8.
  24.10  2.44  2.44     3835.      3046.      6880.    39.22    31.15    70.37
   0.980    0.779    1.759      35.183       0.092         6.553         1.787
  MAPP  TSCSU1141251020210 01     SCR2     SB2: 6.5 0.06  0.73  5.83   714.   7.
  22.80  2.40  2.40     2963.      2122.      5085.    30.95    22.16    53.11
   0.851    0.609    1.460      19.357       0.155         5.124         1.397
  MAPP  TSCSU1141252020110 01     SCR1     SB2: 6.5 0.05  0.68  6.29   637.   7.
  22.80  2.41  2.41     2644.      2100.      4743.    27.76    22.05    49.80
   0.694    0.551    1.245      16.884       0.157         4.805         1.310
  MAPP  TSESU1141261010110 01     SCR2     SB1: 4.5 0.07  1.00  4.41   567.   7.
  26.80  2.42  2.42     2353.      1869.      4222.    22.92    18.20    41.12
   0.779    0.619    1.398      20.559       0.091         3.967         1.082
  MAPP  TSKSU1141261010110 01     SCR2     SB1: 4.5 0.06  1.00  4.41   222.  10.
  32.50  2.53  2.53      921.       613.      1534.     9.49     6.31    15.80
```

```
   0.261    0.174    0.435       7.902       0.035         1.525         0.416
Ret.ExistScrub & SCR          41
  MAPP  TSYSS1141262020304 01     SCR1     SB1: 4.5 0.05  0.15  3.41   871.   6.
  40.90  3.78  3.78     3615.      2871.      6486.    35.96    28.56    64.51
   0.899    0.714    1.613       4.710       0.110         6.224         1.698
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-----------------------------------------------------------------------------
Year: 2020, Region: UPNY     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  UPNY  TSYBA0141022020105 01              BE3:18.4 0.04  0.25  1.84   675.   0.
  41.20  3.91  3.91     2801.      2225.      5026.    25.74    20.44    46.18
```

```
   0.541    0.429    0.970       5.842       0.043         4.301         1.173
  UPNY  TSXBA0141022020105 01              BE3:18.4 0.04  0.09  1.84   157.   0.
  43.50  3.91  3.91      652.       517.      1169.     6.23     4.95    11.17
   0.131    0.104    0.235       0.492       0.010         1.040         0.284
Scrubbed Coal                   2
Unscrubbed Coal_NOx             3
  UPNY  TCOLN0131022020102 01              BA2: 5.2 0.26  1.10  3.31    47.   0.
  32.20  2.45  2.45      195.       105.       300.     2.03     1.09     3.12
   0.264    0.142    0.406       1.717       0.005         0.291         0.079
  UPNY  TSFBO0141022020102 01              BA2: 5.2 0.21  1.10  3.31   105.   0.
  32.30  1.54  1.54      436.       346.       782.     4.18     3.32     7.50
   0.433    0.344    0.776       4.124       0.012         0.698         0.190
  UPNY  TSFBN0131022020102 01              BA2: 5.2 0.25  1.10  3.31   210.   0.
  32.20  2.45  2.45      872.       625.      1497.     8.71     6.25    14.96
   1.071    0.768    1.840       8.226       0.025         1.393         0.380
Unscrubbed Coal                 4
  UPNY  TCOLU0111022050110 01              BD2:12.5 0.35  1.50  8.03   117.   0.
  32.00  1.54  1.54      486.       386.       871.     5.05     4.01     9.06
   0.884    0.702    1.586       6.795       0.036         0.844         0.230
  UPNY  TCOLU0111022020210 01              BE3:18.4 0.46  2.20 16.58    44.   0.
  32.00  1.54  1.54      183.       145.       328.     1.90     1.51     3.41
   0.437    0.347    0.784       3.748       0.028         0.317         0.087
  UPNY  TCOLU0111022050210 01              BD2:12.5 0.35  1.50 12.54    82.   0.
  32.00  1.54  1.54      340.       270.       611.     3.54     2.81     6.35
   0.619    0.492    1.111       4.763       0.040         0.591         0.161
  UPNY  TCOLU0131022020110 01              BA2: 5.2 0.46  1.10  3.31    55.   0.
  32.00  1.54  1.54      228.        81.       309.     2.37     0.84     3.22
   0.546    0.194    0.740       1.770       0.005         0.300         0.082
  UPNY  TSCBU0131022020110 01              BA2: 5.2 0.45  1.10  3.31   362.   0.
  32.00  1.54  1.54     1502.       534.      2037.    15.62     5.56    21.18
   3.547    1.262    4.808      11.651       0.035         1.973         0.538
  UPNY  TSFBU0131022020210 01              BA2: 5.2 0.35  1.10  4.65   266.   0.
  32.00  1.54  1.54     1104.       734.      1838.    11.24     7.48    18.72
   1.990    1.324    3.314      10.298       0.044         1.744         0.476
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  UPNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   498.   0.
 192.50  0.74  0.74     2242.      1604.      3846.    23.52    16.82    40.35
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  UPNY  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   619.   0.
 206.50  1.07  1.07     2017.      2271.      4288.    21.67    24.39    46.05
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  UPNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1154.   0.
 167.70  0.78  0.78     4861.      4233.      9094.    52.21    45.47    97.67
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  UPNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   840.   0.
 192.60  0.77  0.77     3326.      3081.      6408.    33.14    30.70    63.85
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  UPNY  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  5551.   0.
  15.50  0.00  0.00    15534.     10355.     25889.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
IGCC                           10
Turbine                        11
Biomass                        12
  UPNY  BIOMS00  47 000000 00              B1-: 0.6 0.02  0.08  0.57    18.   0.
  44.80  5.36  5.36       78.        60.       138.     0.72     0.56     1.28
   0.007    0.006    0.013       0.051       0.000         0.000         0.000
Geothermal                     13
Landfill Gas                   14
  UPNY  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     6.   0.
  78.60 10.48 10.48       27.        20.        47.     0.37     0.28     0.65
   0.045    0.034    0.079       0.000       0.000         0.000         0.000
```

```
Wind                            15
  UPNY  WIND 00     000000 00              NONE     0.00  0.00 71.00   194.   0.
  26.40  0.00  0.00        87.        49.       136.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
  UPNY  FCELL00     000000 00              GAS      0.40  0.00  0.00     1.   0.
  15.00  2.06  2.06         5.         3.         8.     0.03     0.03     0.06
   0.007    0.005    0.012       0.000       0.000         0.003         0.001
Solar                           17
Non Fossil_Other                18
  UPNY  OTHER00     000000 00              NONE     0.00  0.00 71.00    34.   0.
 103.60  0.00  0.00       150.       118.       268.     1.65     1.30     2.95
   0.000    0.000    0.000       0.000       0.105         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
  UPNY  NYIMP00     000000 00              NONE     0.00  0.00 71.00  3000.   0.
   0.00  0.00  0.00       702.       507.      1209.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                        22
  UPNY  CGCOU0131022050710 01            BA2: 5.2 0.35  1.10  5.17    80.   0.
  11.70  1.54  1.54       324.       261.       585.     2.47     2.00     4.47
   0.433    0.350    0.783       2.460       0.012         0.416         0.114
  UPNY  CGCOS0131022050304 01            BG1: 8.0 0.35  0.25  3.22    44.   0.
  28.10  2.94  2.94       178.       144.       322.     1.74     1.41     3.15
   0.305    0.246    0.551       0.394       0.005         0.293         0.080
  UPNY  CGCOD0131022050307 01            BE3:18.4 0.23  0.21  0.55    50.   0.
  23.30  3.84  3.84       202.       163.       366.     1.62     1.31     2.93
   0.184    0.149    0.333       0.313       0.001         0.273         0.074
Cgn_Gas                         23
  UPNY  CGCC 0112   000000 00              GAS      0.16  0.00  0.00   139.   0.
  13.90  1.03  1.03       467.        72.       539.     3.96     0.61     4.57
   0.319    0.049    0.368       0.000       0.000         0.242         0.066
  UPNY  CGCC 0113   000000 00              GAS      0.19  0.00  0.00   153.   0.
  19.00  1.03  1.03       103.        79.       182.     0.97     0.74     1.71
   0.091    0.069    0.160       0.000       0.000         0.091         0.025
  UPNY  CGCC 0122   000000 00              GAS      0.18  0.00  0.00  1566.   0.
  13.90  1.03  1.03      5264.      4038.      9302.    42.38    32.51    74.89
   3.878    2.974    6.852       0.000       0.000         3.974         1.084
  UPNY  CGCC 0123   000000 00              GAS      0.19  0.00  0.00   877.   0.
  13.90  1.03  0.00       415.         0.       415.     3.90     0.00     3.90
   0.365    0.000    0.365       0.000       0.000         0.207         0.056
Cgn_Oil                         24
Cgn_Other                       25
  UPNY  CGOTH00     000000 00              NONE     0.00  0.00 71.00    44.   0.
 103.60  0.00  0.00       191.       147.       338.     2.55     1.97     4.52
   0.000    0.000    0.000       0.000       0.160         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
Ret.ExistScrub & SCR            41
  UPNY  TSXBS0141022020103 01     SCR1   BE3:18.4 0.05  0.09  1.84   149.  11.
  43.60  3.98  3.98       618.       491.      1110.     5.85     4.64    10.49
```

```
   0.146    0.116    0.262       0.462       0.010         0.977         0.266
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  UPNY  TSCBU0141022020210 01     RL01     BE3:18.4 0.05  0.09  1.84   379.  41.
  45.09  3.58  3.58     1572.      1249.      2821.    16.70    13.26    29.96
   0.417    0.332    0.749       1.318       0.028         2.790         0.761
  UPNY  TSGBU0141022020210 01     RL01     BE3:18.4 0.05  0.09  1.84   403.  40.
  44.69  3.58  3.58     1674.      1330.      3003.    17.77    14.12    31.89
   0.444    0.353    0.797       1.403       0.029         2.970         0.810
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-----------------------------------------------------------------------------
Year: 2020, Region: DSNY     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
```

```
Scrubbed Coal                   2
Unscrubbed Coal_NOx             3
Unscrubbed Coal                 4
  DSNYNYTSABU0141012020110 01              BA2: 5.2 0.38  1.10  3.31   541.   0.
  25.60  1.54  1.54     2245.      1494.      3739.    22.87    15.21    38.08
   4.287    2.852    7.140      20.943       0.063         3.546         0.967
  DSNYNYTSABU0142012020110 01              BA2: 5.2 0.37  0.80  3.31   197.   0.
  26.40  1.54  1.54      818.       544.      1362.     8.87     5.90    14.77
   1.636    1.088    2.724       5.913       0.024         1.375         0.375
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  DSNY  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   967.   0.
 237.60  1.25  1.25     2750.      3380.      6131.    27.83    34.20    62.02
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  DSNY  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   442.   0.
  14.60  0.00  0.00     1237.       824.      2061.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  DSNY  CC   0122   000000 00              GAS      0.02  0.00  0.00  1830.   0.
  13.90  1.03  1.03     8202.      6291.     14493.    61.51    47.18   108.70
   0.615    0.472    1.087       0.000       0.000         5.769         1.573
  DSNY  CC   0123   000000 00              GAS      0.19  0.00  0.00   101.   0.
  13.90  1.03  1.03       23.        17.        40.     0.25     0.19     0.44
   0.023    0.018    0.041       0.000       0.000         0.024         0.006
  DSNY  CC   1     (b)                     GAS      0.02  0.00  0.00  1659.  72.
  11.70  1.95  1.95     7632.      5508.     13140.    53.85    38.86    92.71
   0.538    0.389    0.927       0.000       0.000         4.920         1.342
IGCC                           10
Turbine                        11
Biomass                        12
Geothermal                     13
Landfill Gas                   14
Wind                           15
  DSNY  WIND 00     000000 00              NONE     0.00  0.00 71.00    64.   0.
  26.40  0.00  0.00       29.        16.        45.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  DSNY  OTHER00     000000 00              NONE     0.00  0.00 71.00    82.   0.
 103.60  0.00  0.00      361.       285.       646.     3.98     3.14     7.11
   0.000    0.000    0.000       0.000       0.252         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
  DSNY  PUMPS00     000000 00              NONE     0.00  0.00 71.00  1040.   0.
   6.50  0.00  0.00        0.       155.       155.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
  DSNY  CGCC 0113   000000 00              GAS      0.19  0.00  0.00    35.   0.
  13.90  1.03  1.03       24.        18.        42.     0.22     0.17     0.39
   0.021    0.016    0.036       0.000       0.000         0.021         0.006
  DSNY  CGCC 0123   000000 00              GAS      0.19  0.00  0.00   487.   0.
  13.90  1.03  1.03      327.       251.       578.     3.09     2.36     5.45
   0.288    0.221    0.510       0.000       0.000         0.289         0.079
Cgn_Oil                        24
Cgn_Other                      25
  DSNY  CGOTH00     000000 00              NONE     0.00  0.00 71.00     7.   0.
 103.60  0.00  0.00       30.        23.        54.     0.13     0.10     0.23
   0.000    0.000    0.000       0.000       0.008         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
```

NonCG IPP_Other	28
Blr_Coal	29
Blr_Gas	30
Blr_Oil	31
Blr_Other	32
SteamOnly Cogen	33
Rep.Coal-CC	34
Rep.O/G-CC	35
Rep.Coal-IGCC	36
Ret.Scrubber	37
Ret.ExistSCR & Scrub	38
Ret.ExistSNCR & Scrub	39
Ret.SCR	40
Ret.ExistScrub & SCR	41
Ret.SNCR	42
Ret.ExistScrub & SNCR	43
Ret.SCR+Scrb	44
Ret.SNCR+Scrub	45
Ret.Gas Reburn	46
Ret.ExistScrub+GasR	47
Ret.GasReburn+Scrub	48
Ret.ACI	49
Ret.ExistScrub&ACI	50
Ret.ExistSCR&ACI	51
Ret.ExistSNCR&ACI	52
Ret.ACI & SCR	53
Ret.ExistScrub&ACI&SCR	54
Ret.ACI & SNCR	55
Ret.ExistScrub&ACI&SNCR	56
Ret.ACI & Srub	57
Ret.ExistSCR&ACI&Scrub	58
Ret.ExistSNCR&ACI&Scrub	59
Ret.ExistSNCR&ExistScrub&ACI	60
Ret.ExistSCR&ExistScrub&ACI	61
Ret.ExistNOx&ExistScrub&ACI	62
Ret.SCR & Scrub & ACI	63
Ret.SNCR & Scrub & ACI	64
Ret.O/G SCR	65
Ret.O/G SNCR	66
Ret.Nuclear (age 30+10 yrs)	67
Ret.Nuclear (age 40+20 yrs)	68
Ret. Biomass Cofiring	69
CT Early Retirement	70
CC Early Retirement	71
O/G Early Retirement	72
Coal Early Retirement	73
Nuke Early Retirement	74

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation reported in BBtu

---

Year: 2020, Region: NYC (Emissions By Plant)

	NOx Emission	SO2 Emission	MER Emission	CO2 Emission	Carbon Emission
	Generation			Trillion	

```
                                                        (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                            (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
Oil/Gas Steam                  5
  NYC   STLSU0121   000000 00              GAS      0.14  0.00  0.00  4747.   0.
  20.90  0.00  2.57        0.      1627.      1627.     0.00    15.52    15.52
   0.000    1.063    1.063       0.000       0.000         0.824         0.225
Oil/Gas Steam_Nox              6
Nuclear                        7
Hydro                          8
Comb.Cycle Gas                 9
  NYC   CC   0122   000000 00              GAS      0.10  0.00  0.00   490.   0.
  13.90  1.03  1.03      988.       758.      1746.     7.91     6.07    13.98
   0.411    0.316    0.727       0.000       0.000         0.742         0.202
  NYC   CC   0123   000000 00              GAS      0.19  0.00  0.00    78.   0.
  13.90  1.03  1.03       17.        40.        58.     0.19     0.45     0.64
   0.018    0.042    0.060       0.000       0.000         0.034         0.009
  NYC   CC   1     (b)                     GAS      0.02  0.00  0.00  1476.  72.
  11.70  1.95  1.95     6210.      3675.      9885.    43.82    25.93    69.75
   0.438    0.259    0.698       0.000       0.000         3.702         1.010
IGCC                          10
Turbine                       11
  NYC   CT   0113   000000 00              GAS      0.13  0.00  0.00    85.   0.
  11.20  1.03  1.03       20.        15.        34.     0.25     0.19     0.44
   0.016    0.012    0.028       0.000       0.000         0.024         0.006
  NYC   CT   0114   000000 00              GAS      0.12  0.00  0.00  1094.   0.
  11.20  0.00  1.03        0.        33.        33.     0.00     0.48     0.48
   0.000    0.029    0.029       0.000       0.000         0.025         0.007
  NYC   CT   0122   000000 00              GAS      0.08  0.00  0.00   460.   0.
   2.80  1.03  1.03      106.       238.       344.     1.16     2.60     3.76
   0.046    0.104    0.151       0.000       0.000         0.200         0.054
  NYC   CT   0124   000000 00              GAS      0.13  0.00  0.00   762.   0.
  11.20  1.03  1.03       49.       131.       180.     0.69     1.87     2.56
   0.044    0.119    0.163       0.000       0.000         0.136         0.037
  NYC   ACT  1     (b)                     GAS      0.10  0.00  0.00   651.  55.
   7.80  2.94  2.94      458.       682.      1141.     3.92     5.83     9.75
   0.196    0.292    0.488       0.000       0.000         0.518         0.141
Biomass                       12
Geothermal                    13
Landfill Gas                  14
Wind                          15
  NYC   WIND 00     000000 00              NONE     0.00  0.00 71.00    59.   0.
  26.40  0.00  0.00       27.        15.        41.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
Fossil_Other                  19
Pump Storage                  20
Int. Imports                  21
Cgn_Coal                      22
Cgn_Gas                       23
  NYC   CGCT 0112   000000 00              GAS      0.13  0.00  0.00     2.   0.
   2.80  1.03  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  NYC   CGCC 0112   000000 00              GAS      0.19  0.00  0.00    15.   0.
  13.90  1.03  1.03       10.        23.        33.     0.09     0.20     0.29
   0.008    0.019    0.027       0.000       0.000         0.016         0.004
```

```
  NYC   CGCC 0113   000000 00               GAS      0.19  0.00  0.00    46.   0.
  19.10  1.03  1.03       31.        71.       102.     0.28     0.65     0.93
   0.026    0.061    0.087       0.000       0.000         0.050         0.014
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: LILC     (Emissions By Plant)
```

```
-------------------------------------------------

            NOx                   SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
Hydro                          8
Comb.Cycle Gas                 9
  LILC  CC   0113   000000 00              GAS      0.19  0.00  0.00    22.   0.
  19.90  1.03  1.03        5.        11.        16.     0.05     0.13     0.18
   0.005    0.012    0.017       0.000       0.000         0.010         0.003
  LILC  CC   0122   000000 00              GAS      0.06  0.00  0.00   136.   0.
  13.90  1.03  1.03      457.       351.       808.     3.60     2.76     6.36
   0.106    0.081    0.188       0.000       0.000         0.337         0.092
  LILC  CC   1     (b)                     GAS      0.02  0.00  0.00  2144.  72.
  11.70  1.95  1.95     9861.      7116.     16977.    69.58    50.21   119.79
   0.696    0.502    1.198       0.000       0.000         6.357         1.734
IGCC                          10
Turbine                       11
  LILC  CT   0112   000000 00              GAS      0.10  0.00  0.00     9.   0.
  11.20  1.03  1.03        6.         5.        11.     0.06     0.05     0.11
   0.003    0.002    0.006       0.000       0.000         0.006         0.002
  LILC  CT   0114   000000 00              GAS      0.13  0.00  0.00   332.   0.
  11.10  0.00  1.03        0.        57.        57.     0.00     0.81     0.81
   0.000    0.052    0.052       0.000       0.000         0.043         0.012
  LILC  CT   0122   000000 00              GAS      0.08  0.00  0.00   405.   0.
   2.80  1.03  1.03       94.       210.       303.     1.02     2.29     3.31
   0.041    0.092    0.133       0.000       0.000         0.176         0.048
  LILC  CT   0123   000000 00              GAS      0.12  0.00  0.00   902.   0.
  10.30  0.00  1.03        0.       155.       155.     0.00     2.05     2.05
   0.000    0.124    0.124       0.000       0.000         0.109         0.030
  LILC  CT   0124   000000 00              GAS      0.11  0.00  0.00   205.   0.
  11.20  0.00  1.03        0.        35.        35.     0.00     0.50     0.50
   0.000    0.027    0.027       0.000       0.000         0.027         0.007
Biomass                       12
Geothermal                    13
Landfill Gas                  14
Wind                          15
  LILC  WIND 00     000000 00              NONE     0.00  0.00 71.00    36.   0.
  26.40  0.00  0.00       16.         9.        25.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
  LILC  OTHER00     000000 00              NONE     0.00  0.00 59.78   137.   0.
 103.60  0.00  0.00      604.       476.      1080.     6.64     5.24    11.88
   0.000    0.000    0.000       0.000       0.355         0.000         0.000
Fossil_Other                  19
Pump Storage                  20
Int. Imports                  21
Cgn_Coal                      22
```

```
Cgn_Gas                        23
  LILC  CGCT 0111   000000 00              GAS      0.13  0.00  0.00     1.   0.
   7.80  1.03  1.03        2.         2.         4.     0.02     0.01     0.03
   0.001    0.001    0.002       0.000       0.000         0.002         0.000
  LILC  CGCT 0112   000000 00              GAS      0.13  0.00  0.00    15.   0.
   2.80  1.03  1.03       10.         8.        18.     0.10     0.08     0.18
   0.007    0.005    0.011       0.000       0.000         0.010         0.003
  LILC  CGCC 0112   000000 00              GAS      0.19  0.00  0.00    13.   0.
  13.90  1.03  1.03       58.        45.       103.     0.44     0.34     0.78
   0.041    0.032    0.073       0.000       0.000         0.041         0.011
  LILC  CGCC 0113   000000 00              GAS      0.19  0.00  0.00    61.   0.
  18.90  1.03  1.03       41.        31.        72.     0.42     0.32     0.74
   0.039    0.030    0.069       0.000       0.000         0.039         0.011
  LILC  CGCC 0122   000000 00              GAS      0.19  0.00  0.00    43.   0.
  13.90  1.03  1.03      145.       111.       255.     1.09     0.84     1.93
   0.102    0.078    0.180       0.000       0.000         0.102         0.028
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
  LILC  STLSU0121   000000 00     OC01     GAS      0.02  0.00  0.00   322.  65.
  11.70  1.95  1.95     1441.      1105.      2547.    10.41     7.98    18.39
   0.104    0.080    0.184       0.000       0.000         0.976         0.266
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
```

```
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: NENG     (Emissions By Plant)
--------------------------------------------------
```

	NOx			SO2	MER	CO2	Carbon
	Emission (1000 Tons)		Generation (GWh)	Emission (1000 Tons)	Emission (Tons)	Emission (lb/MBtu)	Emission (lb/TBtu)
						Trillion (Btu)	(MW)
Unit	VOM Mill/KWh	$ /KWyr			Fuel	NOx	SO2 MERCURY Cap. Cap
.	FO&M WINT. SUMM.		WINTER	SUMMER	Total	WINTER	SUMMER Total
	WINTER	SUMMER	Total	Total	Total	Total	Total
Scrubbed Coal_NOx			1				
NENG TSDBD2831012020107 01					BG1: 8.0	0.20	0.25 2.73 78. 0.
	43.10	3.85	3.85	324.	257.	581.	3.37 2.68 6.04
	0.339	0.269	0.607	0.755	0.008	0.563	0.153
Scrubbed Coal			2				
Unscrubbed Coal_NOx			3				
NENGNHTCOLN2931012020102 01					BA2: 5.2	0.30	1.10 3.31 97. 0.
	32.20	2.45	2.45	259.	143.	402.	2.69 1.49 4.18
	0.402	0.223	0.625	2.299	0.007	0.389	0.106
NENG TSDBN2841012020102 01					BA2: 5.2	0.19	1.10 3.31 142. 0.
	32.20	2.45	2.45	480.	210.	690.	4.95 2.16 7.12
	0.481	0.210	0.690	3.914	0.012	0.663	0.181
Unscrubbed Coal			4				
NENG TCOLU0911012050710 01					BA2: 5.2	0.43	1.10 5.17 14. 0.
	22.40	1.54	1.54	58.	46.	104.	0.60 0.48 1.08
	0.130	0.103	0.233	0.596	0.003	0.101	0.028
NENGCTTSABU3241012020110 01					BA2: 5.2	0.24	1.10 3.31 385. 0.
	26.40	1.54	1.54	433.	344.	776.	4.17 3.31 7.48
	0.492	0.391	0.883	4.115	0.012	0.697	0.190
Oil/Gas Steam			5				
Oil/Gas Steam_Nox			6				
Nuclear			7				
NENG NUKE 00 8000000 00					NUC	0.00	0.00 0.00 675. 0.
	254.10	1.32	1.32	3433.	1762.	5196.	34.94 17.93 52.88
	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NENG NUKE 00 7000000 00					NUC	0.00	0.00 0.00 506. 0.
	240.70	1.18	1.18	2530.	1602.	4131.	25.61 16.21 41.82
	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NENG NUKE 00 8000000 00					NUC	0.00	0.00 0.00 872. 0.
	211.90	1.17	1.17	4096.	2597.	6692.	41.58 26.36 67.94
	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NENG NUKE 00 8000000 00					NUC	0.00	0.00 0.00 1157. 0.
	208.10	1.23	1.23	5326.	3794.	9120.	53.06 37.80 90.86
	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NENG NUKE 00 7000000 00					NUC	0.00	0.00 0.00 1161. 0.
	172.00	0.75	0.75	4891.	4259.	9150.	49.65 43.24 92.89

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  NENG  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2059.   0.
  15.20  0.00  0.00     3489.      1724.      5212.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  NENG  CC   0113   000000 00              GAS      0.11  0.00  0.00    96.   0.
  19.30  1.03  1.03       21.        22.        43.     0.24     0.24     0.47
   0.013    0.014    0.027       0.000       0.000         0.025         0.007
  NENG  CC   0122   000000 00              GAS      0.03  0.00  0.00  5859.   0.
  14.00  1.03  1.03    22581.     15537.     38118.   171.91   118.28   290.19
   2.836    1.952    4.788       0.000       0.000        15.401         4.200
  NENG  CC   0123   000000 00              GAS      0.12  0.00  0.00  1003.   0.
  19.20  0.00  1.03        0.       172.       172.     0.00     1.91     1.91
   0.000    0.117    0.117       0.000       0.000         0.101         0.028
  NENG  CC   0912   000000 00              GAS      0.02  0.00  0.00    33.   0.
  13.90  1.03  1.03      148.       113.       261.     1.11     0.85     1.96
   0.011    0.009    0.020       0.000       0.000         0.104         0.028
  NENG  CC   0922   000000 00              GAS      0.02  0.00  0.00  1351.   0.
  13.90  1.03  1.03     6055.      4644.     10699.    45.41    34.83    80.25
   0.454    0.348    0.802       0.000       0.000         4.259         1.161
  NENGCTCC   3222   000000 00              GAS      0.04  0.00  0.00  1684.   0.
  13.90  1.03  1.03     7547.      5789.     13337.    57.37    44.00   101.37
   1.090    0.836    1.926       0.000       0.000         5.380         1.467
  NENGNHCC   3022   000000 00              GAS      0.02  0.00  0.00  1245.   0.
  13.90  1.03  1.03     5580.      4280.      9860.    41.85    32.10    73.95
   0.418    0.321    0.739       0.000       0.000         3.925         1.070
IGCC                            10
Turbine                         11
  NENG  CT   0112   000000 00              GAS      0.11  0.00  0.00    37.   0.
   9.30  1.03  1.03       26.        19.        45.     0.25     0.19     0.44
   0.014    0.011    0.025       0.000       0.000         0.023         0.006
  NENG  CT   0122   000000 00              GAS      0.08  0.00  0.00   693.   0.
   2.80  0.00  1.03        0.       119.       119.     0.00     1.31     1.31
   0.000    0.054    0.054       0.000       0.000         0.070         0.019
  NENG  CT   0912   000000 00              GAS      0.13  0.00  0.00     1.   0.
  11.20  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENGCTCT   3212   000000 00              GAS      0.12  0.00  0.00     6.   0.
  10.60  1.03  1.03        4.         3.         7.     0.04     0.03     0.07
   0.002    0.002    0.004       0.000       0.000         0.004         0.001
  NENGCTCT   3222   000000 00              GAS      0.08  0.00  0.00   333.   0.
   2.80  1.03  1.03       77.        57.       134.     0.84     0.63     1.47
   0.034    0.025    0.059       0.000       0.000         0.078         0.021
Biomass                         12
  NENG  BIOMS00  48 000000 00              B1-: 0.6 0.02  0.08  0.57   309.   0.
  44.80  5.36  5.36      751.       155.       906.     6.88     1.42     8.30
   0.069    0.014    0.083       0.332       0.002         0.000         0.000
  NENG  BIOCC0     (a)                    B1-: 0.6 0.02  0.08  0.57    63. 215.
  44.80  5.34  5.34      281.        91.       373.     2.31     0.75     3.06
   0.023    0.008    0.031       0.123       0.001         0.000         0.000
Geothermal                      13
Landfill Gas                    14
  NENG  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    18.   0.
  78.60 10.48 10.48       81.        61.       142.     1.10     0.84     1.94
   0.135    0.103    0.238       0.000       0.000         0.000         0.000
  NENG  LG   0     (a)                    WASTE    0.25  0.00  0.00   248. 195.
  78.60 10.48 10.48     1075.       776.      1850.    10.75     7.76    18.50
   1.322    0.954    2.276       0.000       0.000         0.000         0.000
Wind                            15
  NENG  WIND 00     000000 00              NONE     0.00  0.00 71.00    31.   0.
  26.40  0.00  0.00       14.         8.        22.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  NENG  WIN510     (a)                    NONE     0.00  0.00 71.00   765. 155.
  26.40  0.00  0.00     1456.       747.      2204.     0.00     0.00     0.00
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                        16
  NENG  FCELL00     000000 00                GAS      0.40  0.00  0.00     1.   0.
  15.00  2.06  2.06        3.         2.         5.     0.03     0.01     0.04
   0.005    0.002    0.007       0.000       0.000         0.002         0.001
Solar                            17
Non Fossil_Other                 18
  NENG  OTHER00     000000 00                NONE     0.00  0.00 70.72   537.   0.
 103.60  0.00  0.00     2367.      1867.      4234.    26.04    20.53    46.57
   0.000    0.000    0.000       0.000       1.647         0.000         0.000
Fossil_Other                     19
Pump Storage                     20
  NENG  PUMPS00     000000 00                NONE     0.00  0.00 71.00  1959.   0.
   6.50  0.00  0.00      569.       446.      1015.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                     21
  NENG  NHIMP00     000000 00                NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00     4671.      3371.      8042.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                         22
  NENG  CGCOU0931012050710 01               BA2: 5.2 0.43  1.10  5.17    76.   0.
  16.70  1.54  1.54      308.       248.       556.     2.63     2.12     4.75
   0.566    0.456    1.022       2.614       0.012         0.443         0.121
Cgn_Gas                          23
  NENG  CGCT 0912   000000 00                GAS      0.10  0.00  0.00     7.   0.
   2.80  1.03  1.03        5.         4.         8.     0.05     0.04     0.08
   0.002    0.002    0.004       0.000       0.000         0.004         0.001
  NENG  CGCT 0922   000000 00                GAS      0.08  0.00  0.00   346.   0.
   2.80  1.03  1.03       67.        60.       127.     0.73     0.65     1.38
   0.029    0.026    0.055       0.000       0.000         0.073         0.020
  NENGCTCGCT 3112   000000 00                GAS      0.13  0.00  0.00     3.   0.
   7.80  1.03  1.03        2.         2.         4.     0.02     0.01     0.03
   0.001    0.001    0.002       0.000       0.000         0.002         0.001
  NENGNHCGCT 3012   000000 00                GAS      0.08  0.00  0.00     5.   0.
   2.80  1.03  1.03        1.         3.         4.     0.01     0.03     0.04
   0.001    0.001    0.002       0.000       0.000         0.002         0.001
  NENG  CGCC 0113   000000 00                GAS      0.12  0.00  0.00    13.   0.
  18.90  1.03  1.03        9.         7.        15.     0.08     0.06     0.14
   0.005    0.004    0.009       0.000       0.000         0.008         0.002
  NENG  CGCC 0122   000000 00                GAS      0.12  0.00  0.00   661.   0.
  13.90  1.03  1.03      807.       571.      1378.     6.45     4.57    11.02
   0.390    0.276    0.667       0.000       0.000         0.585         0.159
  NENG  CGCC 0123   000000 00                GAS      0.13  0.00  0.00   132.   0.
  18.90  1.03  1.03       89.        68.       157.     0.85     0.65     1.50
   0.055    0.042    0.097       0.000       0.000         0.080         0.022
  NENGCTCGCC 3112   000000 00                GAS      0.20  0.00  0.00    13.   0.
  18.90  1.03  1.03       26.        20.        46.     0.21     0.16     0.38
   0.021    0.016    0.038       0.000       0.000         0.020         0.005
  NENGCTCGCC 3113   000000 00                GAS      0.20  0.00  0.00     1.   0.
  19.90  1.03  1.03        1.         1.         1.     0.01     0.00     0.01
   0.001    0.000    0.001       0.000       0.000         0.001         0.000
  NENGCTCGCC 3122   000000 00                GAS      0.04  0.00  0.00    32.   7.
  20.60  1.13  1.13       22.        16.        38.     0.18     0.13     0.31
   0.004    0.003    0.006       0.000       0.000         0.016         0.004
  NENGCTCGCC 3123   000000 00                GAS      0.04  0.00  0.00    73.   6.
  21.50  1.13  1.13       49.        38.        87.     0.49     0.37     0.86
   0.010    0.007    0.017       0.000       0.000         0.046         0.012
Cgn_Oil                          24
Cgn_Other                        25
  NENG  CGBIO00  48 000000 00                B1-: 0.6 0.02  0.08  0.57    72.   0.
  44.80  5.36  5.36      312.       108.       421.     2.66     0.93     3.59
   0.027    0.009    0.036       0.144       0.001         0.000         0.000
  NENG  CGOTH00     000000 00                NONE     0.00  0.00 52.33    27.   0.
 103.60  0.00  0.00      117.        90.       207.     0.19     0.14     0.33
   0.000    0.000    0.000       0.000       0.009         0.000         0.000
```

```
NonCG IPP_Coal                26
NonCG IPP_Gas                 27
NonCG IPP_Other               28
Blr_Coal                      29
Blr_Gas                       30
Blr_Oil                       31
Blr_Other                     32
SteamOnly Cogen               33
Rep.Coal-CC                   34
  NENG  TSDBN2831012020102 01     CC01     GAS      0.02  0.00  0.00   152.  65.
  11.70  1.95  1.95      681.       523.      1204.     4.92     3.77     8.69
   0.049    0.038    0.087       0.000       0.000         0.461         0.126
  NENG  TSEBN2842012020102 01     CC01     GAS      0.02  0.00  0.00    61.  65.
  11.70  1.95  1.95      273.       210.       483.     1.97     1.51     3.49
   0.020    0.015    0.035       0.000       0.000         0.185         0.050
Rep.O/G-CC                    35
  NENG  CGHSC2821   000000 00     OC01     GAS      0.02  0.00  0.00    17.  65.
  11.70  1.95  1.95       78.        60.       138.     0.56     0.43     0.99
   0.006    0.004    0.010       0.000       0.000         0.053         0.014
Rep.Coal-IGCC                 36
Ret.Scrubber                  37
  NENGCTTSABU3241012020110 01     ML02     BA2: 5.2 0.24  0.04  1.76   101.  26.
  36.57  2.51  2.51      417.       332.       749.     4.11     3.26     7.37
   0.485    0.385    0.870       0.162       0.006         0.686         0.187
Ret.ExistSCR & Scrub          38
  NENGNHTSABC2941011010101 01     ML01     BE3:18.4 0.10  0.09  1.84   424.  28.
  40.11  3.49  3.49     1759.      1397.      3157.    17.34    13.77    31.11
   0.858    0.682    1.540       1.369       0.029         2.897         0.790
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
Ret.ExistScrub & SCR          41
  NENGCTCGCOS3141012050703 01     SCR1     BE3:18.4 0.05  0.11  1.84   195.  10.
  28.70  3.94  3.94      789.       637.      1426.     7.64     6.16    13.80
   0.191    0.154    0.345       0.759       0.013         1.285         0.351
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  NENGCTTSABU3241012020110 01     RL02     BA2: 5.2 0.05  0.04  0.52   174.  34.
  37.07  3.43  3.43      723.       575.      1298.     7.12     5.65    12.77
   0.178    0.141    0.319       0.281       0.003         1.190         0.324
  NENG  TSEBU2841012020110 01     RL02     BE3:18.4 0.05  0.09  1.84   364.  38.
  41.03  3.44  3.44     1511.      1200.      2712.    14.38    11.42    25.79
   0.359    0.285    0.645       1.135       0.024         2.402         0.655
  NENG  TSEBU2841012020110 01     SCR1ML02 BE3:18.4 0.05  0.09  1.84   804.  38.
  41.04  3.44  3.44     3336.      2649.      5985.    31.73    25.20    56.93
   0.793    0.630    1.423       2.505       0.052         5.302         1.446
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
```

```
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: FRCC     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  FRCCFLTSXBA1541122020105 01              BG1: 8.0 0.15  0.20  0.80   441.   0.
  23.60  3.91  3.91     1830.      1454.      3284.    19.03    15.12    34.15
   1.428    1.134    2.561       3.415       0.014         3.180         0.867
  FRCCFLTSXBA1541132020105 01              BG1: 8.0 0.10  0.25  0.80   430.   0.
  43.30  3.91  3.91     1785.      1417.      3202.    17.05    13.54    30.59
   0.852    0.677    1.530       3.824       0.012         2.849         0.777
  FRCCFLTSABA1541132020105 01              BE1: 6.1 0.10  0.11  0.61   842.   0.
  43.30  3.91  3.91     3494.      2775.      6270.    33.22    26.38    59.60
   1.661    1.319    2.980       3.278       0.018         5.550         1.514
  FRCCFLTSZBA1541122020105 01              BG1: 8.0 0.10  0.25  0.80   439.   0.
  41.20  3.91  3.91     1822.      1447.      3269.    17.30    13.74    31.05
   0.865    0.687    1.552       3.881       0.012         2.891         0.789
Scrubbed Coal                  2
  FRCCFLTSGBS1531132020103 01              BD1: 5.1 0.31  0.54  1.72    88.   0.
  43.00  2.94  2.94      365.       290.       655.     3.76     2.99     6.75
   0.574    0.456    1.029       1.812       0.006         0.629         0.171
  FRCCFLTSGBS1532132020103 01              BD1: 5.1 0.35  0.51  1.72    87.   0.
  43.00  2.94  2.94      361.       287.       648.     3.86     3.07     6.93
   0.678    0.538    1.217       1.773       0.006         0.646         0.176
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  FRCCFLTCOLU1531132020110 01              BB2: 4.1 0.46  1.00  2.62    92.   0.
  32.00  1.54  1.54      382.       303.       685.     3.97     3.15     7.12
   0.913    0.725    1.639       3.562       0.009         0.663         0.181
  FRCCFLTSDBU1541132020210 01              BB1: 3.4 0.31  1.00  3.07   218.   0.
  22.40  1.54  1.54      905.       719.      1623.     9.23     7.33    16.56
   1.435    1.140    2.575       8.279       0.025         1.542         0.421
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
```

```
Nuclear                          7
  FRCC  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   847.   0.
 143.80  0.53  0.53     3846.      3107.      6953.    42.01    33.94    75.95
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
  FRCC  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   700.   0.
 155.20  0.57  0.57     3062.      2375.      5437.    33.76    26.18    59.94
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
  FRCC  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   700.   0.
 155.20  0.57  0.57     3296.      2390.      5687.    36.31    26.33    62.64
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
  FRCC  NUKE 00    7000000 00                NUC      0.00  0.00  0.00   842.   0.
 232.80  1.24  1.24     3814.      2739.      6553.    40.69    29.23    69.92
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
  FRCC  NUKE 00    8000000 00                NUC      0.00  0.00  0.00   847.   0.
 143.80  0.53  0.53     3584.      3092.      6676.    39.80    34.33    74.12
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
Hydro                            8
  FRCC  HYDRO00     000000 00                HYDRO    0.00  0.00  0.00    47.   0.
  15.10  0.00  0.00       83.        38.       121.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000          0.000          0.000
Comb.Cycle Gas                   9
  FRCCFLCC   1512   000000 00                GAS      0.05  0.00  0.00    85.   0.
  19.90  1.03  1.03      286.       292.       578.     2.23     2.28     4.50
   0.058    0.059    0.117       0.000       0.000          0.239          0.065
  FRCCFLCC   1513   000000 00                GAS      0.11  0.00  0.00    89.   0.
  19.50  1.03  1.03       20.       138.       158.     0.20     1.36     1.56
   0.010    0.072    0.083       0.000       0.000          0.083          0.023
  FRCCFLCC   1522   000000 00                GAS      0.05  0.00  0.00 15348.   0.
  14.10  1.03  1.03    35203.     32235.     67438.   272.79   249.79   522.57
   6.956    6.370   13.326       0.000       0.000         27.733          7.564
  FRCCFLCC   1523   000000 00                GAS      0.15  0.00  0.00   789.   0.
  19.40  1.03  1.03       16.       135.       151.     0.17     1.50     1.67
   0.013    0.111    0.124       0.000       0.000          0.089          0.024
  FRCCFLCC   1524   000000 00                GAS      0.10  0.00  0.00    34.   0.
  13.90  0.00  1.03        0.         6.         6.     0.00     0.07     0.07
   0.000    0.003    0.003       0.000       0.000          0.004          0.001
  FRCC  CC   8     (b)                      GAS      0.02  0.00  0.00  5178.  66.
  11.70  1.95  1.95    23814.     17186.     41000.   168.03   121.27   289.30
   1.680    1.213    2.893       0.000       0.000         15.353          4.187
IGCC                            10
  FRCCFLIGCC 1541122050710 00                BG1: 8.0 0.10  0.00  0.40   250.   0.
  31.40  1.00  1.00     1083.       837.      1921.     7.88     6.09    13.97
   0.394    0.305    0.699       0.000       0.003          1.301          0.355
Turbine                         11
  FRCCFLCT   1512   000000 00                GAS      0.10  0.00  0.00    68.   0.
   9.60  1.03  1.03       16.        88.       104.     0.16     0.92     1.08
   0.008    0.048    0.056       0.000       0.000          0.057          0.016
  FRCCFLCT   1522   000000 00                GAS      0.08  0.00  0.00  5658.   0.
   3.00  1.03  1.03     1308.      2848.      4156.    14.35    31.25    45.60
   0.588    1.281    1.869       0.000       0.000          2.420          0.660
  FRCCFLCT   1523   000000 00                GAS      0.12  0.00  0.00  2073.   0.
  10.10  0.00  1.03        0.       306.       306.     0.00     3.91     3.91
   0.000    0.232    0.232       0.000       0.000          0.207          0.057
Biomass                         12
  FRCC  BIOMS00  49 000000 00                B1-: 0.6 0.02  0.08  0.57    54.   0.
  44.80  5.36  5.36      234.       181.       415.     2.16     1.67     3.83
   0.022    0.017    0.038       0.153       0.001          0.000          0.000
Geothermal                      13
Landfill Gas                    14
  FRCC  LFGAS00     000000 00                WASTE    0.25  0.00  0.00     2.   0.
  78.60 10.48 10.48        9.         7.        16.     0.12     0.09     0.22
   0.015    0.011    0.026       0.000       0.000          0.000          0.000
Wind                            15
Fuel Cell                       16
Solar                           17
```

```
Non Fossil_Other                18
  FRCC  OTHER00     000000 00              NONE     0.00  0.00 60.92   424.   0.
 103.60  0.00  0.00     1869.      1474.      3343.    20.56    16.21    36.77
   0.000    0.000    0.000       0.000       1.120         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
Cgn_Gas                         23
  FRCCFLCGCT 1512   000000 00              GAS      0.11  0.00  0.00    27.   0.
   2.80  1.03  1.03        6.        42.        48.     0.06     0.42     0.48
   0.004    0.024    0.027       0.000       0.000         0.026         0.007
  FRCCFLCGCT 1522   000000 00              GAS      0.09  0.00  0.00   336.   0.
   2.80  1.03  1.03       78.        58.       136.     0.86     0.64     1.51
   0.041    0.030    0.071       0.000       0.000         0.080         0.022
  FRCCFLCGCC 1513   000000 00              GAS      0.14  0.00  0.00    18.   0.
  13.90  1.03  1.03       12.        28.        40.     0.12     0.27     0.39
   0.008    0.019    0.028       0.000       0.000         0.021         0.006
  FRCCFLCGCC 1522   000000 00              GAS      0.14  0.00  0.00   437.   0.
  13.90  1.03  1.03      294.       676.       970.     2.37     5.45     7.82
   0.167    0.384    0.551       0.000       0.000         0.415         0.113
  FRCCFLCGCC 1523   000000 00              GAS      0.14  0.00  0.00   454.   0.
  13.90  1.03  1.03      102.       702.       804.     0.98     6.77     7.75
   0.069    0.477    0.546       0.000       0.000         0.411         0.112
Cgn_Oil                         24
  FRCCFLCGGAU1511   000000 00              GAS      0.29  0.00  0.00    16.   0.
  16.70  0.00  2.57        0.        29.        29.     0.00     0.25     0.25
   0.000    0.037    0.037       0.000       0.000         0.013         0.004
Cgn_Other                       25
  FRCC  CGBIO00  49 000000 00              B1-: 0.6 0.02  0.08  0.57    61.   0.
  44.80  5.36  5.36      264.       204.       469.     2.26     1.74     4.00
   0.023    0.017    0.040       0.160       0.001         0.000         0.000
  FRCC  CGOTH00     000000 00              NONE     0.00  0.00  0.00    22.   0.
 103.60  0.00  0.00       95.        74.       169.     0.73     0.57     1.30
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
  FRCCFLSTGAU1511   000000 00     OC01     GAS      0.02  0.00  0.00   174.  48.
  11.70  1.95  1.95      780.       598.      1378.     5.63     4.32     9.95
   0.056    0.043    0.099       0.000       0.000         0.528         0.144
  FRCCFLSTHSU1511   000000 00     OC01     GAS      0.02  0.00  0.00    30.  48.
  11.70  1.95  1.95      134.       103.       238.     0.97     0.74     1.72
   0.010    0.007    0.017       0.000       0.000         0.091         0.025
  FRCCFLSTHSU1521   000000 00     OC01     GAS      0.02  0.00  0.00  1906.  48.
  11.70  1.95  1.95     8543.      6553.     15096.    61.68    47.31   108.99
   0.617    0.473    1.090       0.000       0.000         5.784         1.578
  FRCCFLSTHSU1522   000000 00     OC01     GAS      0.02  0.00  0.00   910.  48.
  11.70  1.95  1.95     4078.      3128.      7207.    29.45    22.59    52.03
   0.294    0.226    0.520       0.000       0.000         2.761         0.753
  FRCCFLSTLSU1511   000000 00     OC01     GAS      0.02  0.00  0.00    98.  48.
  11.70  1.95  1.95      439.       337.       776.     3.17     2.43     5.60
   0.032    0.024    0.056       0.000       0.000         0.297         0.081
  FRCCFLSTLSU1512   000000 00     OC01     GAS      0.02  0.00  0.00    76.  48.
  11.70  1.95  1.95      341.       261.       602.     2.46     1.89     4.35
   0.025    0.019    0.043       0.000       0.000         0.231         0.063
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
```

```
Ret.ExistSCR & Scrub          38
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
  FRCCFLTSDBU1541132020110 01     SCR1     BB2: 4.1 0.05  1.00  2.62   300.   8.
  29.30  2.45  2.45     1244.       988.      2232.    11.85     9.41    21.26
   0.296    0.235    0.531      10.629       0.028         1.980         0.540
  FRCCFLCGCOU1541132050710 01     SCR1     BB1: 3.4 0.05  1.00  3.41   653.  10.
  13.20  2.53  2.53     2643.      2133.      4777.    26.06    21.03    47.10
   0.652    0.526    1.177      23.548       0.080         4.386         1.196
Ret.ExistScrub & SCR          41
  FRCCFLTSEBS1541132020103 01     SCR1     BD1: 5.1 0.05  0.51  0.51   844.   8.
  43.10  3.85  3.85     3503.      2782.      6285.    35.92    28.53    64.45
   0.898    0.713    1.611      16.531       0.016         6.002         1.637
  FRCCFLTSGBS1541132020103 01     SCR1     BE1: 6.1 0.05  0.56  0.61   356.  11.
  43.60  3.96  3.96     1477.      1173.      2651.    15.15    12.03    27.18
   0.379    0.301    0.680       7.565       0.008         2.531         0.690
  FRCCFLTSZBS1541121020103 01     SCR2     BG1: 8.0 0.05  0.29  0.80   957.   8.
  41.00  3.84  3.84     3972.      3154.      7126.    38.34    30.45    68.79
   1.016    0.807    1.823       9.974       0.028         6.406         1.747
  FRCCFLTSZBS1541122020103 01     SCR1     BG1: 8.0 0.05  0.50  0.80  2315.   7.
  41.00  3.82  3.82     9608.      7631.     17238.    93.50    74.26   167.76
   2.338    1.857    4.194      41.941       0.067        15.623         4.261
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  FRCCFLTSDBU1541131020110 01     SO01     BG1: 8.0 0.05  0.25  0.80  1365.  27.
  30.58  3.75  3.75     5664.      4498.     10162.    54.04    42.92    96.96
   1.378    1.094    2.472      12.120       0.039         9.029         2.462
  FRCCFLTSDBU1541132020110 01     SCR1LO01 BG1: 8.0 0.05  0.25  0.80   522.  34.
  39.03  3.82  3.82     2167.      1721.      3888.    21.08    16.74    37.81
   0.527    0.418    0.945       4.727       0.015         3.521         0.960
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
```

rted in BBtu

Year: 2020, Region: VACA (Emissions By Plant)

NOx SO2 MER CO2 Carbon

Generation Trillion
Emission Emission Emission Emission Emission
(lb/MBtu)(lb/TBtu)(MW) $
/KWyr VOM Mill/KWh (GWh) (Btu)
(1000 Tons) (1000 Tons) (Tons) (Mil Tonnes)(Mil Tonnes)
Unit Fuel NOx SO2 MERCURY Cap. Cap
. FO&M WINT. SUMM. WINTER SUMMER Total WINTER SUMMER Total
WINTER SUMMER Total Total Total Total Total Total
Scrubbed Coal_NOx 1
VACAVATSXBD0341092020307 01 BG1: 8.0 0.19 0.20 0.24 882. 0.
23.30 3.85 3.85 3092. 0. 3092. 32.16 0.00 32.16
3.087 0.000 3.087 3.216 0.004 2.995 0.817
VACAVATSXBD0341092020307 01 BF2:11.1 0.19 0.12 0.33 882. 0.
23.30 3.85 3.85 568. 2907. 3475. 5.91 30.23 36.14
0.567 2.903 3.470 2.169 0.006 3.366 0.918
VACA TSXBA0641101020105 01 BD1: 5.1 0.06 0.08 0.51 270. 0.
43.30 3.91 3.91 1121. 890. 2010. 11.18 8.88 20.05
0.330 0.262 0.591 0.752 0.005 1.867 0.509
VACA TSXBA0641102020105 01 BD1: 5.1 0.04 0.08 0.51 1100. 0.
34.80 3.91 3.91 4565. 3626. 8191. 43.46 34.52 77.98
0.847 0.673 1.521 2.924 0.020 7.261 1.980
VACA TSXBA0642101020105 01 BD1: 5.1 0.06 0.08 0.51 270. 0.
41.20 3.91 3.91 1121. 890. 2010. 11.89 9.44 21.33
0.339 0.269 0.608 0.800 0.005 1.987 0.542
VACAVATSBBA0341092020105 01 BF2:11.1 0.01 0.15 1.11 373. 0.
43.50 3.91 3.91 1548. 1229. 2777. 14.59 11.59 26.18
0.073 0.058 0.131 1.964 0.015 2.438 0.665
VACAWVTSABA0641052020105 01 BF2:11.1 0.01 0.15 1.11 1066. 0.
43.50 3.91 3.91 4424. 3514. 7938. 41.03 32.59 73.62
0.205 0.163 0.368 5.522 0.041 6.856 1.870
VACA TSZBA0641052020105 01 BG1: 8.0 0.01 0.25 0.80 521. 0.
43.30 3.91 3.91 2162. 1717. 3880. 21.20 16.83 38.03
0.106 0.084 0.190 4.754 0.015 3.542 0.966
VACAVATCOLD0331092050308 01 BG1: 8.0 0.24 0.18 3.22 57. 0.
23.30 3.85 3.85 237. 188. 424. 2.46 1.95 4.41
0.301 0.239 0.541 0.386 0.007 0.411 0.112
Scrubbed Coal 2
VACAVATCOLS0331092050304 01 BG1: 8.0 0.38 0.13 3.22 35. 0.
23.10 2.94 2.94 145. 115. 261. 1.51 1.20 2.71
0.285 0.226 0.511 0.176 0.004 0.252 0.069
VACA TABS 0631042050304 01 BG1: 8.0 0.28 0.20 3.22 74. 0.
23.10 2.94 2.94 307. 244. 551. 3.19 2.54 5.73
0.442 0.351 0.794 0.573 0.009 0.534 0.146
VACA TSXBS0641102020304 01 BE2:10.4 0.15 0.09 0.52 385. 0.
23.10 2.94 2.94 1598. 1269. 2867. 16.62 13.20 29.81
1.246 0.990 2.236 1.312 0.008 2.776 0.757
Unscrubbed Coal_NOx 3
VACANCTSBBN0641102020102 01 BA2: 5.2 0.26 1.10 3.31 514. 0.
32.20 2.45 2.45 2133. 1694. 3827. 20.12 15.98 36.10
2.635 2.093 4.729 19.853 0.060 3.361 0.917
VACAVATSBBN0341091020102 01 BA2: 5.2 0.35 1.10 3.31 389. 0.
32.20 2.45 2.45 1614. 824. 2439. 16.53 8.44 24.97
2.860 1.460 4.320 13.735 0.041 2.326 0.634

VACAVATSBBN0341092020102 01 BA2: 5.2 0.22 1.10 3.31 159. 0.
32.20 2.45 2.45 589. 392. 981. 5.78 3.85 9.63
0.633 0.421 1.054 5.294 0.016 0.896 0.244
VACAVATSBBN0341092020202 01 BA2: 5.2 0.28 1.10 4.65 156. 0.
32.20 2.45 2.45 647. 331. 978. 6.34 3.24 9.58
0.878 0.448 1.326 5.266 0.022 0.892 0.243
VACANCTOLBO0632102020202 01 BA2: 5.2 0.27 1.10 4.65 76. 0.
32.30 1.54 1.54 315. 161. 476. 3.40 1.73 5.13
0.462 0.236 0.697 2.821 0.012 0.478 0.130
VACA TSHBO0632102020202 01 BA2: 5.2 0.23 1.10 4.65 200. 0.
32.30 1.54 1.54 540. 424. 964. 6.19 4.85 11.04
0.702 0.551 1.253 6.072 0.026 1.028 0.280
Unscrubbed Coal 4
VACA TCOLU0631041050710 01 BA2: 5.2 0.55 1.10 5.17 74. 0.
11.70 1.54 1.54 307. 157. 464. 3.19 1.63 4.82
0.882 0.450 1.332 2.653 0.012 0.449 0.123
VACA TCOLU0631102050710 01 BA2: 5.2 0.11 0.12 5.17 55. 0.
11.70 1.54 1.54 228. 181. 410. 2.05 1.63 3.69
0.113 0.090 0.203 0.223 0.010 0.343 0.094
VACANCTCOLU0631102020110 01 BA2: 5.2 0.46 1.10 3.31 98. 0.
32.00 1.54 1.54 407. 208. 614. 4.23 2.16 6.39
0.973 0.497 1.470 3.514 0.011 0.595 0.162
VACANCTCOLU0631102020210 01 BA2: 5.2 0.40 1.10 4.65 189. 0.
32.00 1.54 1.54 784. 400. 1185. 8.16 4.16 12.32
1.632 0.833 2.464 6.777 0.029 1.147 0.313
VACAVATCOLU0331092050710 01 BA2: 5.2 0.38 1.10 5.17 57. 0.
11.70 1.54 1.54 198. 121. 319. 2.06 1.26 3.32
0.388 0.237 0.625 1.824 0.009 0.309 0.084
VACANCTOLBU0632101020210 01 BA2: 5.2 0.63 1.10 4.65 97. 0.
32.00 0.00 1.54 0. 206. 206. 0.00 2.32 2.32
0.000 0.727 0.727 1.275 0.005 0.216 0.059
VACANCTOLBU0632102020110 01 BA2: 5.2 0.44 1.10 3.31 79. 0.
32.00 1.54 1.54 275. 167. 442. 2.92 1.78 4.70
0.649 0.396 1.044 2.588 0.008 0.438 0.119
VACAVATOLBU0332092020110 01 BA2: 5.2 0.32 1.10 3.31 100. 0.
32.00 1.54 1.54 348. 212. 560. 3.85 2.35 6.20
0.626 0.382 1.008 3.412 0.010 0.578 0.158
VACAVATOLBU0332092020210 01 BA2: 5.2 0.41 1.10 4.65 71. 0.
32.00 1.54 1.54 189. 150. 340. 2.10 1.67 3.77
0.429 0.341 0.769 2.074 0.009 0.351 0.096
VACANCTSBBU0631102020110 01 BA2: 5.2 0.37 1.10 3.31 78. 0.
32.00 1.54 1.54 324. 165. 489. 3.35 1.71 5.07
0.627 0.320 0.947 2.786 0.008 0.472 0.129
VACANCTSBBU0641102020210 01 BA2: 5.2 0.36 1.10 4.65 106. 0.
32.00 1.54 1.54 440. 225. 664. 4.55 2.32 6.88
0.811 0.414 1.224 3.783 0.016 0.641 0.175
VACA TSCBU0631102020110 01 BA2: 5.2 0.43 1.10 3.31 170. 0.
32.00 1.54 1.54 706. 360. 1066. 7.31 3.73 11.04
1.578 0.806 2.384 6.070 0.018 1.028 0.280
VACASCTSEBU0641102020110 01 BA2: 5.2 0.33 1.10 3.31 250. 0.
32.00 1.54 1.54 1038. 690. 1728. 10.48 6.97 17.45
1.740 1.157 2.897 9.598 0.029 1.625 0.443
VACASCTSEBU0641102020310 01 BA2: 5.2 0.40 1.10 0.57 432. 0.
32.00 1.54 1.54 1793. 1424. 3217. 17.45 13.86 31.31
3.464 2.751 6.215 17.220 0.009 2.916 0.795
VACANCTSGBU0641102020210 01 BA2: 5.2 0.36 1.10 4.65 526. 0.
32.00 1.54 1.54 2183. 1452. 3635. 21.93 14.59 36.52
3.937 2.619 6.556 20.088 0.085 3.401 0.928
VACANCTSGBU0642102020110 01 BA2: 5.2 0.34 1.10 3.31 142. 0.
32.00 1.54 1.54 589. 301. 890. 6.32 3.23 9.55
1.075 0.549 1.624 5.254 0.016 0.890 0.243
VACA TSHBU0631102020110 01 BA2: 5.2 0.37 1.10 3.31 250. 0.
32.00 1.54 1.54 1038. 690. 1728. 10.42 6.93 17.35
1.922 1.279 3.201 9.541 0.029 1.615 0.441
VACA TSHBU0641102020110 01 BA2: 5.2 0.35 1.10 3.31 174. 0.

```
  32.00  1.54  1.54      722.       574.      1296.     7.03     5.59    12.62
   1.224    0.972    2.195       6.939       0.021         1.175         0.320
  VACA  TSHBU0641102020210 01              BA2: 5.2 0.36  1.10  4.65   170.   0.
  32.00  1.54  1.54      706.       469.      1175.     7.06     4.69    11.75
   1.277    0.850    2.127       6.462       0.027         1.094         0.298
  VACANCTSKBU0632102020210 01              BA2: 5.2 0.38  1.10  4.65   322.   0.
  32.00  1.54  1.54      611.       682.      1293.     7.18     8.02    15.19
   1.371    1.531    2.902       8.357       0.035         1.415         0.386
  VACANCTSKBU0641102020210 01              BA2: 5.2 0.40  1.10  4.65   266.   0.
  32.00  1.54  1.54     1104.       564.      1668.    11.36     5.80    17.17
   2.256    1.152    3.407       9.441       0.040         1.598         0.436
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   701.   0.
 137.70  0.51  0.51     3212.      2427.      5640.    32.65    24.67    57.31
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   854.   0.
 147.10  0.66  0.66     3696.      2813.      6508.    38.47    29.28    67.75
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   854.   0.
 147.10  0.66  0.66     4344.      2559.      6903.    44.81    26.39    71.21
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   909.   0.
 134.20  0.46  0.46     4171.      2967.      7138.    41.99    29.88    71.87
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   915.   0.
 132.10  0.42  0.42     4472.      3182.      7654.    44.80    31.87    76.67
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   904.   0.
 132.10  0.42  0.42     4071.      3316.      7387.    42.62    34.72    77.33
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1140.   0.
 133.40  0.47  0.47     5489.      4006.      9496.    55.36    40.40    95.75
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1210.   0.
 141.60  0.49  0.49     5625.      4439.     10063.    58.91    46.49   105.40
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1210.   0.
 141.60  0.49  0.49     5868.      4079.      9947.    60.08    41.76   101.84
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   854.   0.
 147.10  0.66  0.66     2683.      3133.      5816.    27.77    32.42    60.19
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   891.   0.
 134.20  0.46  0.46     3342.      3255.      6597.    33.64    32.78    66.42
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   940.   0.
 149.90  0.53  0.53     3700.      3448.      7148.    37.45    34.91    72.36
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1140.   0.
 133.40  0.47  0.47     5059.      3927.      8986.    51.30    39.82    91.11
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    8000000 00              NUC      0.00  0.00  0.00   976.   0.
 137.80  0.51  0.51     3715.      3541.      7256.    39.90    38.03    77.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1033.   0.
 118.60  0.35  0.35     5082.      2921.      8003.    51.08    29.35    80.43
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  VACA  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1024.   0.
 118.60  0.35  0.35     4212.      3756.      7968.    42.33    37.75    80.08
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  VACA  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  3799.   0.
  15.20  0.00  0.00     6437.      3139.      9575.     0.00     0.00     0.00
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  VACA  CC   0622   000000 00              GAS      0.02  0.00  0.00   450.   0.
  13.90  1.03  1.03     1513.       696.      2209.    11.34     5.22    16.56
   0.113    0.052    0.166       0.000       0.000         0.879         0.240
  VACANCCC   0613   000000 00              GAS      0.10  0.00  0.00    84.   0.
  19.90  0.00  1.03        0.        14.        14.     0.00     0.16     0.16
   0.000    0.008    0.008       0.000       0.000         0.008         0.002
  VACANCCC   0622   000000 00              GAS      0.02  0.00  0.00   940.   0.
  13.90  1.03  1.03     3160.      1454.      4614.    23.70    10.90    34.60
   0.237    0.109    0.346       0.000       0.000         1.836         0.501
  VACAVACC   0322   000000 00              GAS      0.08  0.00  0.00  2336.   0.
  13.90  1.03  1.03     4684.      3613.      8297.    37.83    29.18    67.01
   1.456    1.123    2.580       0.000       0.000         3.556         0.970
  VACA  CC   1     (b)                     GAS      0.02  0.00  0.00  2832.  66.
  11.70  1.95  1.95    10638.      7017.     17655.    75.06    49.51   124.58
   0.751    0.495    1.246       0.000       0.000         6.611         1.803
  VACANCCC   6     (b)                     GAS      0.02  0.00  0.00  1750.  66.
  11.70  1.95  1.95     6035.      4356.     10391.    42.59    30.73    73.32
   0.426    0.307    0.733       0.000       0.000         3.891         1.061
IGCC                          10
Turbine                       11
  VACA  CT   0622   000000 00              GAS      0.08  0.00  0.00  1934.   0.
   2.80  0.00  1.03        0.       333.       333.     0.00     3.65     3.65
   0.000    0.148    0.148       0.000       0.000         0.194         0.053
  VACANCCT   0611   000000 00              GAS      0.10  0.00  0.00     1.   0.
   7.80  1.03  1.03        1.         2.         2.     0.01     0.01     0.02
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  VACANCCT   0622   000000 00              GAS      0.08  0.00  0.00  3047.   0.
   2.80  0.00  1.03        0.       525.       525.     0.00     5.74     5.74
   0.000    0.229    0.229       0.000       0.000         0.304         0.083
  VACAVACT   0312   000000 00              GAS      0.10  0.00  0.00    28.   0.
   7.80  0.00  1.03        0.        14.        14.     0.00     0.14     0.14
   0.000    0.007    0.007       0.000       0.000         0.007         0.002
  VACA  ACT  1     (b)                     GAS      0.10  0.00  0.00  7270.  51.
   7.80  2.94  2.94     3786.      6001.      9787.    32.37    51.30    83.68
   1.619    2.565    4.184       0.000       0.000         4.441         1.211
  VACANCACT  6     (b)                     GAS      0.10  0.00  0.00   929.  51.
   7.80  2.94  2.94      654.      1415.      2069.     5.59    12.10    17.69
   0.279    0.605    0.885       0.000       0.000         0.939         0.256
Biomass                       12
  VACA  BIOMS00  50 000000 00              B1-: 0.6 0.02  0.08  0.57    47.   0.
  44.80  5.36  5.36      204.       157.       361.     1.88     1.45     3.33
   0.019    0.015    0.033       0.133       0.001         0.000         0.000
Geothermal                    13
Landfill Gas                  14
  VACA  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    25.   0.
  78.60 10.48 10.48      112.        85.       197.     1.53     1.16     2.69
   0.188    0.143    0.331       0.000       0.000         0.000         0.000
Wind                          15
  VACA  WIND 00     000000 00              NONE     0.00  0.00 71.00    14.   0.
  26.40  0.00  0.00       20.        11.        31.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
Non Fossil_Other              18
  VACA  OTHER00     000000 00              NONE     0.00  0.00 71.00   140.   0.
 103.60  0.00  0.00      617.       487.      1104.     6.79     5.35    12.14
   0.000    0.000    0.000       0.000       0.431         0.000         0.000
Fossil_Other                  19
Pump Storage                  20
  VACA  PUMPS00     000000 00              NONE     0.00  0.00 71.00  4295.   0.
   6.50  0.00  0.00      687.      1410.      2097.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                  21
```

```
Cgn_Coal                        22
  VACA  CGCOU0631102050710 01                BA2: 5.2 0.35  1.10  5.17    35.   0.
  11.70  1.54  1.54      142.       114.       256.     1.14     0.92     2.05
   0.200    0.161    0.361       1.129       0.005         0.191         0.052
  VACANCCGCOU0611102050310 01                BA2: 5.2 0.39  1.10  0.57    65.   0.
  22.40  1.54  1.54      263.       212.       475.     2.34     1.89     4.23
   0.451    0.364    0.814       2.327       0.001         0.394         0.107
  VACANCCGCOU0611102050710 01                BA2: 5.2 0.39  1.10  5.17    21.   0.
  28.70  1.54  1.54       85.        69.       154.     0.78     0.63     1.41
   0.150    0.121    0.271       0.776       0.004         0.131         0.036
  VACANCCGCOU0631102050310 01                BA2: 5.2 0.39  1.10  0.57   135.   0.
  22.40  1.54  1.54      546.       441.       987.     4.86     3.92     8.79
   0.936    0.755    1.692       4.833       0.002         0.818         0.223
  VACANCCGCOU0631102050710 01                BA2: 5.2 0.39  1.10  5.17   161.   0.
  18.60  1.54  1.54      652.       526.      1178.     5.80     4.68    10.48
   1.116    0.901    2.017       5.764       0.027         0.976         0.266
  VACAVACGCOU0311092050310 01                BA2: 5.2 0.38  1.10  0.57    49.   0.
  22.40  1.54  1.54      198.       160.       358.     1.77     1.42     3.19
   0.333    0.269    0.601       1.754       0.001         0.297         0.081
  VACAVACGCOU0331092050710 01                BA2: 5.2 0.38  1.10  5.17   363.   0.
  11.70  1.54  1.54     1469.      1186.      2655.    11.93     9.63    21.57
   2.250    1.816    4.065      11.861       0.056         2.008         0.548
  VACAVACGCOS0331092050304 01                BE2:10.4 0.38  0.22  4.18    78.   0.
  40.60  2.94  2.94      316.       255.       571.     2.81     2.27     5.08
   0.530    0.427    0.957       0.559       0.011         0.473         0.129
  VACANCCGCOD0631102050308 01                BD1: 5.1 0.25  0.36  2.03    52.   0.
  23.30  3.84  3.84      210.       170.       380.     2.06     1.66     3.72
   0.257    0.207    0.464       0.669       0.004         0.346         0.094
Cgn_Gas                         23
  VACANCCGCT 0612   000000 00                GAS      0.11  0.00  0.00     2.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  VACAVACGCT 0311   000000 00                GAS      0.11  0.00  0.00     7.   0.
   2.80  1.03  1.03        5.        11.        16.     0.04     0.09     0.13
   0.002    0.005    0.008       0.000       0.000         0.007         0.002
  VACAVACGCT 0312   000000 00                GAS      0.11  0.00  0.00    11.   0.
   2.80  0.00  1.03        0.         6.         6.     0.00     0.06     0.06
   0.000    0.003    0.003       0.000       0.000         0.003         0.001
  VACA  CGCC 0622   000000 00                GAS      0.02  0.00  0.00  1000.   0.
  13.90  1.03  1.03     3361.      1547.      4908.    25.21    11.60    36.81
   0.252    0.116    0.368       0.000       0.000         1.954         0.533
  VACA  CGCC 0623   000000 00                GAS      0.11  0.00  0.00   111.   0.
  13.90  0.00  1.03        0.        57.        57.     0.00     0.56     0.56
   0.000    0.030    0.030       0.000       0.000         0.030         0.008
  VACANCCGCC 0623   000000 00                GAS      0.11  0.00  0.00   162.   0.
  18.90  0.00  1.03        0.        83.        83.     0.00     0.83     0.83
   0.000    0.045    0.045       0.000       0.000         0.044         0.012
  VACAVACGCC 0322   000000 00                GAS      0.12  0.00  0.00   288.   0.
  18.90  1.03  1.03     1291.       743.      2033.     9.26     5.33    14.59
   0.551    0.317    0.868       0.000       0.000         0.774         0.211
  VACAVACGCC 0323   000000 00                GAS      0.12  0.00  0.00    91.   0.
  18.90  0.00  1.03        0.        47.        47.     0.00     0.48     0.48
   0.000    0.028    0.028       0.000       0.000         0.025         0.007
Cgn_Oil                         24
Cgn_Other                       25
  VACA  CGBIO00  50 000000 00                B1-: 0.6 0.02  0.08  0.57    34.   0.
  44.80  5.36  5.36      147.       114.       261.     1.26     0.97     2.23
   0.013    0.010    0.022       0.089       0.001         0.000         0.000
  VACA  CGOTH00     000000 00                NONE     0.00  0.00 71.00    10.   0.
 103.60  0.00  0.00       43.        33.        77.     0.18     0.14     0.32
   0.000    0.000    0.000       0.000       0.011         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
```

```
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
  VACANCTSABC0641101020201 01     ML02     BD1: 5.1 0.06  0.06  0.51   685.  27.
  33.49  3.47  3.47     2844.      2259.      5103.    27.50    21.84    49.34
   0.811    0.644    1.456       1.480       0.013         4.595         1.253
  VACANCTSDBC0641101020101 01     LO02     BG1: 8.0 0.06  0.25  0.80  1086.  20.
  34.18  3.83  3.83     4508.      3580.      8088.    41.52    32.97    74.49
   1.142    0.907    2.049       9.312       0.030         6.937         1.892
  VACANCTSDBC0641101020101 01     LD02     BD1: 5.1 0.06  0.15  3.24  1107.  15.
  31.08  4.35  4.35     4593.      3648.      8241.    42.30    33.60    75.90
   1.163    0.924    2.087       5.693       0.123         7.068         1.928
  VACASCTSEBC0641102020101 01     ML02     BE2:10.4 0.04  0.09  1.04  1155.  26.
  37.18  3.49  3.49      107.      3808.      3915.     1.07    38.02    39.09
   0.024    0.836    0.860       1.720       0.020         3.640         0.993
  VACASCTSEBC0641102020101 01     ML02     BE1: 6.1 0.04  0.09  0.61  1155.  26.
  37.18  3.49  3.49     2315.         0.      2315.    23.12     0.00    23.12
   0.509    0.000    0.509       1.017       0.007         2.153         0.587
  VACASCTSEBC0641102020101 01     ML02     BD1: 5.1 0.04  0.06  0.51  1155.  26.
  37.18  3.49  3.49     2372.         0.      2372.    23.68     0.00    23.68
   0.521    0.000    0.521       0.711       0.006         2.205         0.601
  VACASCTSEBC0641102020401 01     ML02     BE1: 6.1 0.05  0.09  0.61   343.  27.
  37.58  3.50  3.50        0.      1129.      1129.     0.00    11.30    11.30
   0.000    0.254    0.254       0.497       0.003         1.052         0.287
  VACASCTSEBC0641102020401 01     ML02     BD1: 5.1 0.05  0.06  0.51   343.  27.
  37.58  3.50  3.50     1422.         0.      1422.    14.23     0.00    14.23
   0.320    0.000    0.320       0.427       0.004         1.325         0.361
  VACANCTSBBC0641101020101 01     ML02     BD1: 5.1 0.05  0.06  0.51   377.  26.
  42.80  3.45  3.45     1564.      1242.      2807.    14.80    11.75    26.55
   0.392    0.311    0.704       0.796       0.007         2.472         0.674
  VACANCTSBBC0641102020101 01     ML02     BD1: 5.1 0.05  0.06  0.51   347.  27.
  37.48  3.47  3.47     1438.      1142.      2581.    13.93    11.06    24.99
   0.313    0.249    0.562       0.750       0.006         2.327         0.635
  VACAVATSBBC0341092020101 01     ML02     BF2:11.1 0.01  0.12  1.11  1126.  26.
  39.53  3.47  3.47     4672.      3711.      8383.    44.98    35.72    80.70
   0.225    0.179    0.403       4.842       0.045         7.515         2.050
  VACANCTSGBC0641102020101 01     LO01     BG1: 8.0 0.03  0.25  0.80   550.  23.
  35.58  3.92  3.92     2283.      1814.      4097.    23.14    18.38    41.53
   0.359    0.285    0.644       5.191       0.017         3.867         1.055
Ret.ExistSNCR & Scrub          39
  VACAVATSBBN0341092020102 01     ML01     BF2:11.1 0.22  0.12  3.77    17.  33.
  45.69  3.44  3.44       69.        55.       124.     0.69     0.55     1.24
   0.076    0.060    0.136       0.075       0.002         0.116         0.032
Ret.SCR                        40
  VACA  TSCBU0641102020110 01     SCR1     BA2: 5.2 0.05  1.10  3.31   306.  11.
  27.00  2.58  2.58     1270.      1009.      2279.    12.73    10.11    22.84
   0.318    0.253    0.571      12.560       0.038         2.127         0.580
  VACANCTSGBU0641101020110 01     SCR2     BA2: 5.2 0.06  1.10  3.31   165.  11.
  32.60  2.57  2.57      685.       456.      1140.     7.13     4.75    11.88
   0.218    0.145    0.362       6.534       0.020         1.106         0.302
Ret.ExistScrub & SCR           41
  VACA  TSXBS0641101020103 01     SCR2     BD1: 5.1 0.06  0.14  0.51   270.   9.
  41.10  3.90  3.90     1121.       890.      2011.    11.07     8.79    19.86
   0.315    0.251    0.566       1.400       0.005         1.850         0.504
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  VACANCTSBBU0641102020110 01     RL02     BD1: 5.1 0.05  0.06  0.51  1841.  34.
  37.88  3.42  3.42     7639.      6067.     13705.    73.81    58.62   132.43
```

```
   1.845    1.466    3.311       3.973       0.034        12.333         3.363
  VACANCTSDBU0641102020110 01     RL02     BD1: 5.1 0.05  0.06  0.51  2046.  29.
  37.91  3.36  3.36     8492.      6744.     15236.    78.62    62.44   141.06
   1.965    1.561    3.526       4.232       0.036        13.135         3.582
  VACANCTSGBU0641101020210 01     SL01     BD1: 5.1 0.05  0.06  0.51   259.  34.
  43.39  3.50  3.50     1077.       855.      1932.    10.96     8.71    19.67
   0.285    0.226    0.511       0.590       0.005         1.832         0.500
  VACANCTSABU0641102020210 01     ML02SCR1 BD1: 5.1 0.05  0.06  0.51   729.  35.
  33.08  3.43  3.43     3027.      2404.      5431.    29.53    23.46    52.99
   0.738    0.586    1.325       1.590       0.013         4.935         1.346
  VACANCTSGBU0641102020110 01     ML02SCR1 BD1: 5.1 0.05  0.06  0.51   269.  36.
  44.29  3.49  3.49     1117.       887.      2005.    11.21     8.91    20.12
   0.280    0.223    0.503       0.604       0.005         1.873         0.511
  VACANCTSGBU0642101020110 01     SCR2ML01 BD1: 5.1 0.05  0.06  0.51   162.  45.
  46.00  3.63  3.63      670.       532.      1203.     7.29     5.79    13.07
   0.197    0.156    0.353       0.392       0.003         1.217         0.332
  VACAVACGCOU0341092050710 01     ML01SCR1 BF2:11.1 0.05  0.12  1.11   195.  40.
  24.15  3.56  3.56      789.       636.      1425.     8.22     6.63    14.85
   0.205    0.166    0.371       0.891       0.008         1.383         0.377
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
  VACANCTCOLS0641102050304 01     HG08     BD1: 5.1 0.39  0.36  0.51   167.   0.
  25.10  3.09  3.09      693.       550.      1244.     7.21     5.72    12.93
   1.388    1.102    2.490       2.328       0.003         1.204         0.328
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: TVA      (Emissions By Plant)
--------------------------------------------------
```

```
            NOx                   SO2         MER           CO2           Carbon

                      Generation                          Trillion
         Emission             Emission    Emission      Emission       Emission
                                                        (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                            (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
  TVA KYTSYBA0641201010105 01              BG1: 8.0 0.09  0.25  0.80  1192.   0.
  43.50  3.91  3.91     4947.      3929.      8876.    49.20    39.08    88.28
   2.140    1.700    3.840      11.035       0.035         8.221         2.242
  TVA   TSXBA0641221020105 01              BG1: 8.0 0.06  0.25  0.80  2448.   0.
  43.30  3.91  3.91    10160.      8069.     18229.    98.79    78.46   177.25
   2.816    2.236    5.052      22.157       0.071        16.506         4.502
  TVA   TSXBA0641222020105 01              BG1: 8.0 0.04  0.25  0.80   477.   0.
  43.50  3.91  3.91     1980.      1572.      3552.    19.48    15.47    34.96
   0.370    0.294    0.664       4.370       0.014         3.255         0.888
  TVA   TSXBA0641222020705 01              BG1: 8.0 0.04  0.25  0.80   467.   0.
  43.50  3.91  3.91     1938.      1539.      3477.    19.19    15.24    34.42
   0.345    0.274    0.620       4.303       0.014         3.206         0.874
  TVA MSTCOLA1641242020105 01              BG1: 8.0 0.11  0.25  0.80   440.   0.
  23.60  3.91  3.91     1826.      1450.      3276.    16.43    13.05    29.49
   0.904    0.718    1.622       3.686       0.012         2.746         0.749
  TVA KYTSEBA0641201010105 01              BG1: 8.0 0.10  0.25  0.80   977.   0.
  43.30  3.91  3.91     4055.      3220.      7275.    40.83    32.43    73.27
   1.960    1.557    3.517       9.158       0.029         6.823         1.861
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  TVA   TSABU0641202020310 01              BB2: 4.1 0.39  1.00  0.45  1206.   0.
  32.00  1.54  1.54     5005.      3975.      8980.    50.44    40.06    90.49
   9.860    7.831   17.692      45.247       0.020         8.427         2.298
  TVA   TSCBU0641212020210 01              BA2: 5.2 0.39  1.10  4.65   704.   0.
  32.00  1.54  1.54     2922.      2320.      5242.    27.80    22.08    49.87
   5.420    4.305    9.725      27.431       0.116         4.644         1.267
  TVA   TSDBU0642222020210 01              BB1: 3.4 0.31  1.00  3.07   642.   0.
  32.00  1.54  1.54     1713.       546.      2258.    19.57     6.24    25.81
   3.033    0.967    4.000      12.903       0.040         2.403         0.655
  TVA   TSDBU0642222020210 01              BB2: 4.1 0.31  1.00  3.69   642.   0.
  32.00  1.54  1.54        0.       814.       814.     0.00     9.31     9.31
   0.000    1.443    1.443       4.653       0.017         0.867         0.236
  TVA   TSGBU0641222020110 01              BB2: 4.1 0.37  1.00  2.62   222.   0.
  32.00  1.54  1.54      921.       732.      1653.     9.75     7.75    17.50
   1.819    1.445    3.263       8.749       0.023         1.629         0.444
  TVA   TSGBU0642222020110 01              BB2: 4.1 0.38  1.00  2.62   444.   0.
  32.00  1.54  1.54     1843.      1463.      3306.    20.05    15.92    35.97
   3.769    2.993    6.763      17.985       0.047         3.350         0.914
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  2429.   0.
 109.50  0.32  0.32     9624.      8910.     18534.   100.38    92.94   193.31
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1244.   0.
 109.50  0.32  0.32     6061.      4289.     10350.    63.22    44.74   107.95
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1252.   0.
 133.70  0.37  0.37     6187.      4372.     10559.    62.94    44.47   107.41
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1144.   0.
  99.20  0.57  0.57     5772.      3709.      9482.    62.00    39.84   101.83
```

```
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1259.   0.
 133.70  0.37  0.37     5219.      4401.      9620.    53.09    44.77    97.85
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  TVA   HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  3934.   0.
  15.40  0.00  0.00    11469.      6255.     17724.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  TVA   CC   0622   000000 00              GAS      0.02  0.00  0.00    79.   0.
  13.90  1.03  1.03      354.       204.       558.     2.66     1.53     4.18
   0.027    0.015    0.042       0.000       0.000         0.222         0.061
  TVA MSCC   1622   000000 00              GAS      0.02  0.00  0.00  2500.   0.
  13.90  1.03  1.03     9852.      6446.     16297.    73.89    48.34   122.23
   0.739    0.483    1.222       0.000       0.000         6.487         1.769
IGCC                            10
Turbine                         11
  TVA   CT   0612   000000 00              GAS      0.08  0.00  0.00     4.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  TVA   CT   0622   000000 00              GAS      0.08  0.00  0.00  3741.   0.
   2.90  0.00  1.03        0.       644.       644.     0.00     7.07     7.07
   0.000    0.290    0.290       0.000       0.000         0.375         0.102
  TVA MSCT   1612   000000 00              GAS      0.08  0.00  0.00    20.   0.
   2.80  0.00  1.03        0.         3.         3.     0.00     0.04     0.04
   0.000    0.002    0.002       0.000       0.000         0.002         0.001
  TVA MSCT   1622   000000 00              GAS      0.08  0.00  0.00  1903.   0.
   2.80  0.00  1.03        0.       328.       328.     0.00     3.58     3.58
   0.000    0.143    0.143       0.000       0.000         0.190         0.052
Biomass                         12
  TVA   BIOMS00  50 000000 00              B1-: 0.6 0.02  0.08  0.57     1.   0.
  44.80  5.36  5.36        4.         3.         8.     0.04     0.03     0.07
   0.000    0.000    0.001       0.003       0.000         0.000         0.000
Geothermal                      13
Landfill Gas                    14
  TVA   LFGAS00     000000 00              WASTE    0.25  0.00  0.00     2.   0.
  78.60 10.48 10.48        9.         7.        16.     0.12     0.09     0.22
   0.015    0.011    0.026       0.000       0.000         0.000         0.000
Wind                            15
  TVA   WIND 00     000000 00              NONE     0.00  0.00 71.00     2.   0.
  26.40  0.00  0.00        2.         1.         3.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  TVA   OTHER00     000000 00              NONE     0.00  0.00  0.00    12.   0.
 103.60  0.00  0.00       53.        42.        95.     0.58     0.46     1.04
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
  TVA   PUMPS00     000000 00              NONE     0.00  0.00 71.00  1532.   0.
   6.50  0.00  0.00      541.       687.      1228.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                    21
Cgn_Coal                        22
Cgn_Gas                         23
  TVA   CGCT 0622   000000 00              GAS      0.08  0.00  0.00   308.   0.
   2.80  0.00  1.03        0.        53.        53.     0.00     0.58     0.58
   0.000    0.023    0.023       0.000       0.000         0.031         0.008
  TVA   CGCC 0622   000000 00              GAS      0.02  0.00  0.00  1290.   0.
  13.90  1.03  1.03     4336.      4033.      8370.    32.52    30.25    62.77
   0.325    0.303    0.628       0.000       0.000         3.331         0.909
Cgn_Oil                         24
Cgn_Other                       25
NonCG IPP_Coal                  26
```

```
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
  TVA   TSEBC0641221010101 01     ML01     BF1: 6.8 0.09  0.12  0.68   728.  25.
  43.70  3.49  3.49     3023.      2401.      5424.    29.83    23.69    53.53
   1.313    1.043    2.355       3.212       0.018         4.985         1.359
  TVA   TSCBC0641212020101 01     LO01     BG1: 8.0 0.04  0.25  0.80   861.  18.
  39.90  3.81  3.81     3571.      2836.      6408.    32.46    25.78    58.25
   0.601    0.477    1.078       7.281       0.023         5.424         1.479
  TVA   TSCBC0641212020201 01     ML01     BD1: 5.1 0.04  0.06  0.51  1404.  33.
  46.00  3.50  3.50     5826.      4627.     10454.    58.12    46.16   104.29
   1.046    0.831    1.877       3.129       0.026         9.712         2.649
  TVA   TSLSC0641222020101 01     LO01     BG1: 8.0 0.05  0.25  0.80   457.  25.
  41.90  3.92  3.92     1897.      1507.      3404.    19.20    15.25    34.46
   0.432    0.343    0.775       4.307       0.014         3.209         0.875
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  TVA   TSDBU0641222020110 01     SCR1     BB2: 4.1 0.05  1.00  2.62   564.  12.
  32.60  2.59  2.59     2341.      1859.      4200.    24.52    19.48    44.00
   0.613    0.487    1.100      21.998       0.058         4.097         1.117
Ret.ExistScrub & SCR           41
  TVA   TSWBS0642202030303 01     SCR1     BG1: 8.0 0.05  0.60  0.40   124.  12.
  28.80  4.01  4.01      515.       409.       923.     5.48     4.35     9.83
   0.137    0.109    0.246       2.950       0.002         0.916         0.250
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  TVA   TSLSU0641222020110 01     RL01     BF1: 6.8 0.05  0.12  0.68   697.  42.
  45.49  3.58  3.58     2893.      2298.      5190.    30.21    23.99    54.20
   0.755    0.600    1.355       3.252       0.019         5.047         1.376
  TVA   TSBBU0641212020110 01     ML01SCR1 BE1: 6.1 0.05  0.09  0.61   956.  35.
  43.69  3.49  3.49        0.       124.       124.     0.00     1.21     1.21
   0.000    0.030    0.030       0.053       0.000         0.113         0.031
  TVA   TSBBU0641212020110 01     ML01SCR1 BD1: 5.1 0.05  0.06  0.51   956.  35.
  43.69  3.49  3.49     3966.      3025.      6991.    38.64    29.48    68.12
   0.966    0.737    1.703       2.044       0.017         6.343         1.730
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
```

```
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: SOU      (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                     Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  SOU   TSXBS0642112020103 01              BD1: 5.1 0.34  0.06  1.72   102.   0.
  43.00  2.94  2.94      423.       336.       760.     4.90     3.90     8.80
   0.839    0.666    1.505       0.271       0.008         0.820         0.224
Unscrubbed Coal_NOx            3
  SOU ALTSABC0641232020101 01              BB2: 4.1 0.03  1.00  2.62  1341.   0.
  17.20  2.51  2.51     5565.      4420.      9985.    52.53    41.72    94.24
   0.867    0.688    1.555      47.121       0.124         8.776         2.393
Unscrubbed Coal                4
  SOU ALTSABU0641232020210 01              BB1: 3.4 0.33  1.00  3.07   669.   0.
  22.40  1.54  1.54     2776.      2205.      4982.    26.20    20.81    47.02
   4.363    3.465    7.828      23.508       0.072         4.378         1.194
  SOU   TSBBU0632112020110 01              BA2: 5.2 0.35  1.10  3.31   107.   0.
  32.00  0.00  1.54        0.       227.       227.     0.00     2.51     2.51
   0.000    0.437    0.437       1.381       0.004         0.234         0.064
  SOU   TSBBU0641112020110 01              BA2: 5.2 0.38  1.10  3.31   282.   0.
  26.20  1.54  1.54      752.       597.      1350.     7.60     6.04    13.64
   1.433    1.138    2.572       7.504       0.023         1.270         0.346
  SOU   TSBBU0641242020210 01              BB1: 3.4 0.38  1.00  3.07   534.   0.
  32.00  1.54  1.54     2216.      1760.      3976.    21.67    17.21    38.88
   4.150    3.296    7.446      19.440       0.060         3.621         0.987
  SOU ALTSEBU0632232020110 01              BA1: 3.7 0.36  1.10  2.36   135.   0.
  32.00  0.00  1.54        0.       286.       286.     0.00     3.37     3.37
   0.000    0.608    0.608       1.851       0.004         0.313         0.085
  SOU ALTSEBU0641232020210 01              BA1: 3.7 0.36  1.10  3.32   857.   0.
  32.00  1.54  1.54     3557.      2825.      6381.    34.20    27.17    61.37
   6.106    4.849   10.955      33.754       0.102         5.715         1.559
  SOU ALTSEBU0642232020110 01              BA1: 3.7 0.40  1.10  2.36   224.   0.
  32.00  1.54  1.54      598.       475.      1072.     6.62     5.26    11.88
   1.308    1.039    2.346       6.534       0.014         1.106         0.302
```

```
  SOU   TSFBU0641112020110 01                BA2: 5.2 0.36  1.10  3.31  1674.   0.
  29.70  1.54  1.54     4111.      3745.      7856.    41.21    37.54    78.75
   7.418    6.758   14.176      43.314       0.130         7.334         2.000
  SOU   TSFBU0642112020110 01                BA2: 5.2 0.37  1.10  3.31   320.   0.
  32.00  0.00  1.54        0.       678.       678.     0.00     7.68     7.68
   0.000    1.431    1.431       4.222       0.013         0.715         0.195
  SOU   TSHBU0632222020210 01                BB1: 3.4 0.35  1.00  3.07    80.   0.
  26.40  1.54  1.54      116.        92.       209.     1.32     1.05     2.37
   0.230    0.183    0.413       1.186       0.004         0.221         0.060
  SOU   TSHBU0632222020210 01                BB2: 4.1 0.35  1.00  3.69    80.   0.
  26.40  1.54  1.54      162.       128.       290.     1.84     1.46     3.30
   0.320    0.254    0.573       1.648       0.006         0.307         0.084
Oil/Gas Steam                    5
Oil/Gas Steam_Nox                6
Nuclear                          7
  SOU   NUKE 00    7000000 00                NUC      0.00  0.00  0.00   865.   0.
 149.60  0.69  0.69     3959.      2890.      6850.    43.13    31.49    74.61
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1263.   0.
 128.50  0.38  0.38     6269.      4322.     10591.    68.16    47.00   115.16
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00                NUC      0.00  0.00  0.00  1264.   0.
 128.50  0.38  0.38     6097.      4637.     10734.    66.30    50.42   116.71
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00                NUC      0.00  0.00  0.00   851.   0.
 150.80  0.65  0.65     3078.      2791.      5868.    33.85    30.70    64.55
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00                NUC      0.00  0.00  0.00   860.   0.
 150.80  0.65  0.65     3623.      3155.      6777.    39.85    34.70    74.55
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SOU   NUKE 00    7000000 00                NUC      0.00  0.00  0.00   879.   0.
 149.60  0.69  0.69     3913.      2966.      6879.    42.97    32.58    75.55
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                            8
  SOU   HYDRO00     000000 00                HYDRO    0.00  0.00  0.00  3305.   0.
  14.90  0.00  0.00     6138.      2706.      8844.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  SOU   CC   0612   000000 00                GAS      0.02  0.00  0.00    27.   0.
  13.90  1.03  1.03      121.        93.       214.     0.91     0.70     1.60
   0.009    0.007    0.016       0.000       0.000         0.085         0.023
  SOU   CC   0613   000000 00                GAS      0.10  0.00  0.00    43.   0.
  19.90  0.00  1.03        0.        22.        22.     0.00     0.25     0.25
   0.000    0.013    0.013       0.000       0.000         0.013         0.004
  SOU   CC   0622   000000 00                GAS      0.02  0.00  0.00 10500.   0.
  13.90  1.03  1.03    42148.     32908.     75056.   316.53   247.14   563.67
   3.324    2.595    5.919       0.000       0.000        29.914         8.158
  SOU FLCC   1522   000000 00                GAS      0.02  0.00  0.00   500.   0.
  13.90  1.03  1.03     2241.      1719.      3960.    16.81    12.89    29.70
   0.168    0.129    0.297       0.000       0.000         1.576         0.430
  SOU MSCC   1622   000000 00                GAS      0.02  0.00  0.00  1000.   0.
  13.90  1.03  1.03     4482.      3438.      7920.    33.61    25.78    59.40
   0.336    0.258    0.594       0.000       0.000         3.152         0.860
  SOU   CC   8     (b)                      GAS      0.02  0.00  0.00  7632.  66.
  11.70  1.95  1.95    35101.     25332.     60434.   247.67   178.75   426.42
   2.477    1.787    4.264       0.000       0.000        22.630         6.172
IGCC                            10
Turbine                         11
  SOU   CT   0611   000000 00                GAS      0.10  0.00  0.00     3.   0.
   7.80  1.03  1.03        2.         5.         7.     0.02     0.04     0.06
   0.001    0.002    0.003       0.000       0.000         0.003         0.001
  SOU   CT   0622   000000 00                GAS      0.08  0.00  0.00  7042.   0.
   2.80  0.00  1.03        0.      3247.      3247.     0.00    35.43    35.43
   0.000    1.417    1.417       0.000       0.000         1.880         0.513
  SOU MSCT   1622   000000 00                GAS      0.08  0.00  0.00   640.   0.
```

```
   2.80  0.00  1.03        0.       110.       110.     0.00     1.20     1.20
   0.000    0.048    0.048       0.000       0.000         0.064         0.017
  SOU   ACT  8     (b)                     GAS      0.10  0.00  0.00  4142.  51.
   7.80  2.94  2.94     2058.      6313.      8372.    17.60    53.98    71.58
   0.880    2.699    3.579       0.000       0.000         3.799         1.036
Biomass                        12
Geothermal                     13
Landfill Gas                   14
  SOU   LFGAS00     000000 00                WASTE    0.25  0.00  0.00     9.   0.
  78.60 10.48 10.48       40.        31.        71.     0.55     0.42     0.97
   0.068    0.052    0.119       0.000       0.000         0.000         0.000
Wind                           15
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
Fossil_Other                   19
Pump Storage                   20
  SOU   PUMPS00     000000 00                NONE     0.00  0.00 71.00  1416.   0.
   6.50  0.00  0.00        0.       604.       604.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
  SOU   CGCOU0611112050710 01                BA2: 5.2 0.40  1.10  5.17     1.   0.
  19.60  1.54  1.54        4.         3.         7.     0.04     0.03     0.07
   0.007    0.006    0.013       0.036       0.000         0.006         0.002
Cgn_Gas                        23
  SOU   CGCT 0612   000000 00                GAS      0.10  0.00  0.00     4.   0.
   8.80  1.03  1.03        1.         2.         3.     0.01     0.02     0.03
   0.000    0.001    0.002       0.000       0.000         0.002         0.000
  SOU MSCGCT 1622   000000 00                GAS      0.05  0.00  0.00    70.   0.
   2.80  1.03  1.03       16.        36.        52.     0.16     0.36     0.52
   0.004    0.008    0.012       0.000       0.000         0.027         0.007
  SOU   CGCC 0612   000000 00                GAS      0.10  0.00  0.00     5.   0.
  13.90  1.03  1.03        3.         8.        11.     0.03     0.07     0.10
   0.002    0.003    0.005       0.000       0.000         0.005         0.001
  SOU   CGCC 0622   000000 00                GAS      0.04  0.00  0.00  1604.   0.
  13.90  1.03  1.03     5392.      4136.      9527.    41.31    31.68    72.99
   0.723    0.554    1.277       0.000       0.000         3.874         1.056
  SOU FLCGCC 1522   000000 00                GAS      0.02  0.00  0.00   240.   0.
  13.90  1.03  1.03     1076.       825.      1901.     8.07     6.19    14.26
   0.081    0.062    0.143       0.000       0.000         0.757         0.206
Cgn_Oil                        24
Cgn_Other                      25
  SOU   CGBIO00  50 000000 00                B1-: 0.6 0.02  0.08  0.57     5.   0.
  44.80  5.36  5.36       22.        17.        38.     0.19     0.14     0.33
   0.002    0.001    0.003       0.013       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
  SOU   TSFBU0641112020110 01     ML01     BD1: 5.1 0.36  0.06  1.72   130.  29.
  41.64  2.55  2.55      541.       429.       970.     5.53     4.39     9.93
   0.996    0.791    1.787       0.298       0.009         0.924         0.252
Ret.ExistSCR & Scrub           38
  SOU   TSFBC0641112020101 01     ML02     BD1: 5.1 0.05  0.06  0.51   494.  24.
  36.28  3.51  3.51     2052.      1630.      3681.    21.02    16.70    37.72
   0.473    0.376    0.849       1.131       0.010         3.512         0.958
```

```
  SOU   TSHBC0641112020101 01     LO01     BF2:11.1 0.04  0.15  1.11  4844.  19.
  33.76  3.87  3.87    20104.     15967.     36071.   193.52   153.70   347.22
   4.161    3.305    7.465      26.041       0.193        32.334         8.818
  SOU   TSKBC0641232020101 01     LO01     BG1: 8.0 0.04  0.25  0.80   722.  20.
  34.78  3.88  3.88     2994.      2378.      5373.    29.21    23.20    52.41
   0.584    0.464    1.048       6.551       0.021         4.880         1.331
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
  SOU ALTSABU0641231020210 01     SCR2     BB1: 3.4 0.06  1.00  3.07   670.   7.
  22.80  2.40  2.40     2781.      2208.      4989.    26.24    20.84    47.09
   0.827    0.657    1.483      23.543       0.072         4.385         1.196
  SOU MSTSBBU1641242020110 01     SCR1     BB2: 4.1 0.05  1.00  2.62   262.   9.
  26.90  2.50  2.50     1087.       864.      1951.    10.77     8.55    19.32
   0.269    0.214    0.483       9.660       0.025         1.799         0.491
  SOU   TSCBU0641232020210 01     SCR1     BB1: 3.4 0.05  1.00  3.07  1711.   8.
  29.90  2.46  2.46     7100.      5639.     12739.    66.48    52.80   119.28
   1.662    1.320    2.982      59.638       0.183        11.107         3.029
Ret.ExistScrub & SCR          41
  SOU   TSXBS0641222020203 01     SCR1     BF1: 6.8 0.05  0.51  0.68   472.  10.
  41.10  3.92  3.92     1959.        81.      2040.    20.56     0.85    21.41
   0.514    0.021    0.535       5.491       0.007         1.994         0.544
  SOU   TSXBS0641222020203 01     SCR1     BE1: 6.1 0.05  0.38  0.61   472.  10.
  41.10  3.92  3.92        0.      1475.      1475.     0.00    15.48    15.48
   0.000    0.387    0.387       2.912       0.005         1.442         0.393
  SOU MSTSXBS1641291020203 01     SCR2     BD1: 5.1 0.05  0.07  0.51   200.  10.
  41.20  3.94  3.94      830.       659.      1489.     8.72     6.92    15.64
   0.218    0.173    0.391       0.539       0.004         1.456         0.397
  SOU MSTSXBS1641292020203 01     SCR1     BD1: 5.1 0.05  0.07  0.51   200.  10.
  41.20  3.94  3.94      830.       659.      1489.     8.72     6.92    15.64
   0.218    0.173    0.391       0.539       0.004         1.456         0.397
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  SOU   TSABU0641112020110 01     RL02     BD1: 5.1 0.05  0.06  0.51  1685.  36.
  39.92  3.44  3.44     6992.      5554.     12546.    68.13    54.11   122.24
   1.703    1.353    3.056       3.667       0.031        11.383         3.104
  SOU MSTSABU1641242020110 01     RL02     BF2:11.1 0.05  0.12  1.11   525.  30.
  35.87  3.43  3.43     2178.      1730.      3907.    22.44    17.82    40.26
   0.561    0.446    1.006       2.415       0.022         3.749         1.022
  SOU MSTSABU1641242020210 01     RO01     BG1: 8.0 0.05  0.25  0.80   534.  30.
  31.38  3.83  3.83     2214.      1759.      3973.    22.40    17.79    40.20
   0.560    0.445    1.005       5.024       0.016         3.743         1.021
  SOU   TSCBU0641232020210 01     RL02     BF1: 6.8 0.05  0.12  0.68   189.  34.
  40.13  3.41  3.41        0.        82.        82.     0.00     0.79     0.79
   0.000    0.020    0.020       0.047       0.000         0.073         0.020
  SOU   TSCBU0641232020210 01     RL02     BD1: 5.1 0.05  0.06  0.51   189.  34.
  40.13  3.41  3.41      785.       541.      1326.     7.50     5.18    12.68
   0.188    0.129    0.317       0.380       0.003         1.181         0.322
  SOU   TSESU0641111020210 01     SO01     BF2:11.1 0.06  0.15  1.11    84.  25.
  30.08  3.76  3.76      348.       276.       624.     3.42     2.72     6.14
   0.096    0.076    0.172       0.461       0.003         0.572         0.156
  SOU   TSESU0641112020110 01     RO01     BF2:11.1 0.05  0.15  1.11  1652.  25.
  27.22  3.79  3.79     6854.      5444.     12298.    69.60    55.28   124.88
   1.740    1.382    3.122       9.366       0.069        11.629         3.171
  SOU   TSESU0641112020210 01     RO01     BF2:11.1 0.05  0.15  1.11   815.  25.
  30.08  3.77  3.77     3380.      2685.      6065.    33.64    26.72    60.36
   0.841    0.668    1.509       4.527       0.033         5.621         1.533
  SOU   TSBBU0641242020110 01     LO01SCR1 BG1: 8.0 0.05  0.25  0.80  1080.  30.
  35.37  3.78  3.78     4482.      3559.      8041.    43.16    34.28    77.44
   1.079    0.857    1.936       9.680       0.031         7.212         1.967
  SOU MSTSBBU1641241020110 01     SCR2ML02 BF2:11.1 0.06  0.12  1.11   501.  31.
  35.97  3.42  3.42     2080.      1652.      3733.    20.94    16.63    37.58
   0.607    0.482    1.090       2.255       0.021         3.499         0.954
  SOU   TSESU0641111020210 01     SCR2LO01 BF2:11.1 0.06  0.15  1.11   732.  25.
  30.09  3.76  3.76     3037.      2412.      5449.    29.90    23.75    53.65
```

```
   0.837    0.665    1.502       4.024       0.030         4.996         1.363
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: ENTG     (Emissions By Plant)
--------------------------------------------------
```

	NOx			SO2		MER	CO2		Carbon		
			Generation					Trillion			
	Emission			Emission		Emission	Emission		Emission		
							(lb/MBtu)	(lb/TBtu)	(MW)		$
/KWyr	VOM	Mill/KWh	(GWh)				(Btu)				
	(1000 Tons)			(1000 Tons)		(Tons)	(Mil Tonnes)		(Mil Tonnes)		
Unit						Fuel	NOx	SO2	MERCURY	Cap.	Cap
.	FO&M	WINT.	SUMM.	WINTER	SUMMER	Total	WINTER	SUMMER	Total		
	WINTER	SUMMER	Total	Total	Total	Total	Total		Total		

```
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
Unscrubbed Coal_NOx            3
  ENTGMOTSEBC0541251010101 01              BB2: 4.1 0.07  0.47  2.62  1160.   0.
  27.00  2.51  2.51     4814.      3824.      8638.    48.38    38.43    86.81
   1.766    1.403    3.169      20.400       0.114         8.084         2.205
Unscrubbed Coal                4
  ENTG  TCOLU1041292050210 01              BB1: 3.4 0.28  1.00  3.41   550.   0.
  22.40  1.54  1.54     2283.      1813.      4095.    23.74    18.85    42.59
   3.312    2.630    5.942      21.296       0.073         3.966         1.082
```

```
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  ENTG  NUKE 00    8000000 00              NUC      0.00  0.00  0.00  1141.   0.
 181.60  0.67  0.67     5532.      3951.      9483.    58.30    41.64    99.94
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ENTG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1376.   0.
 154.00  0.53  0.53     6909.      4760.     11669.    77.05    53.07   130.12
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ENTG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   893.   0.
 166.00  0.56  0.56     3808.      3105.      6913.    42.19    34.41    76.60
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ENTG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   996.   0.
 153.40  0.72  0.72     4398.      3453.      7850.    50.20    39.41    89.60
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ENTG  NUKE 00    7000000 00              NUC      0.00  0.00  0.00   945.   0.
 166.00  0.56  0.56     3776.      2832.      6608.    43.22    32.41    75.63
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  ENTG  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   336.   0.
  14.20  0.00  0.00      646.       474.      1120.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  ENTG  CC   1022   000000 00              GAS      0.02  0.00  0.00  6669.   0.
  13.90  1.03  1.03    18412.     20099.     38511.   138.09   150.74   288.83
   1.381    1.507    2.888       0.000       0.000        15.328         4.180
  ENTG  CC   1023   000000 00              GAS      0.08  0.00  0.00   203.   0.
  19.90  0.00  1.03        0.       105.       105.     0.00     0.94     0.94
   0.000    0.038    0.038       0.000       0.000         0.050         0.014
  ENTGMSCC   1622   000000 00              GAS      0.02  0.00  0.00  3835.   0.
  13.90  1.03  1.03     9046.      8481.     17526.    67.84    63.60   131.45
   0.678    0.636    1.314       0.000       0.000         6.976         1.903
  ENTGMOCC   0522   000000 00              GAS      0.02  0.00  0.00   225.   0.
  13.90  1.03  1.03     1008.       348.      1356.     7.56     2.61    10.17
   0.076    0.026    0.102       0.000       0.000         0.540         0.147
  ENTGTXCC   2322   000000 00              GAS      0.02  0.00  0.00   911.   0.
  13.90  1.03  1.03     4083.      1409.      5492.    30.62    10.57    41.19
   0.306    0.106    0.412       0.000       0.000         2.186         0.596
IGCC                          10
Turbine                       11
  ENTG  CT   1012   000000 00              GAS      0.08  0.00  0.00    66.   0.
   2.80  0.00  1.03        0.        11.        11.     0.00     0.12     0.12
   0.000    0.005    0.005       0.000       0.000         0.007         0.002
  ENTG  CT   1022   000000 00              GAS      0.08  0.00  0.00  1476.   0.
   3.00  0.00  1.03        0.       121.       121.     0.00     1.33     1.33
   0.000    0.054    0.054       0.000       0.000         0.070         0.019
  ENTGMSCT   1622   000000 00              GAS      0.08  0.00  0.00   613.   0.
   2.80  0.00  1.03        0.       106.       106.     0.00     1.15     1.15
   0.000    0.046    0.046       0.000       0.000         0.061         0.017
  ENTGMOCT   0522   000000 00              GAS      0.08  0.00  0.00   290.   0.
   2.80  0.00  1.03        0.        50.        50.     0.00     0.55     0.55
   0.000    0.022    0.022       0.000       0.000         0.029         0.008
Biomass                       12
  ENTG  BIOMS00  51 000000 00              B1-: 0.6 0.02  0.08  0.57    10.   0.
  44.80  5.36  5.36       43.        33.        77.     0.40     0.31     0.71
   0.004    0.003    0.007       0.028       0.000         0.000         0.000
Geothermal                    13
Landfill Gas                  14
  ENTG  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     6.   0.
  78.60 10.48 10.48       27.        20.        47.     0.37     0.28     0.65
   0.045    0.034    0.079       0.000       0.000         0.000         0.000
Wind                          15
  ENTG  WIND 00     000000 00              NONE     0.00  0.00 71.00    57.   0.
  26.40  0.00  0.00       57.        32.        88.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
```

```
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  ENTG  OTHER00     000000 00              NONE     0.00  0.00  0.00    31.   0.
 103.60  0.00  0.00      137.       108.       244.     1.50     1.19     2.69
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
Cgn_Gas                         23
  ENTG  CGCT 1012   000000 00              GAS      0.12  0.00  0.00    12.   0.
   2.80  0.00  1.03        0.         6.         6.     0.00     0.06     0.06
   0.000    0.004    0.004       0.000       0.000         0.003         0.001
  ENTG  CGCT 1022   000000 00              GAS      0.08  0.00  0.00   751.   0.
   2.80  0.00  1.03        0.       129.       129.     0.00     1.41     1.41
   0.000    0.057    0.057       0.000       0.000         0.075         0.020
  ENTGTXCGCT 2712   000000 00              GAS      0.10  0.00  0.00     1.   0.
   2.80  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  ENTGTXCGCT 2722   000000 00              GAS      0.08  0.00  0.00    75.   0.
   2.80  0.00  1.03        0.        13.        13.     0.00     0.14     0.14
   0.000    0.006    0.006       0.000       0.000         0.007         0.002
  ENTG  CGCC 1012   000000 00              GAS      0.09  0.00  0.00    52.   0.
  13.90  1.03  1.03       12.        80.        92.     0.09     0.62     0.71
   0.004    0.029    0.033       0.000       0.000         0.038         0.010
  ENTG  CGCC 1013   000000 00              GAS      0.09  0.00  0.00    13.   0.
  19.50  0.00  1.03        0.         7.         7.     0.00     0.06     0.06
   0.000    0.003    0.003       0.000       0.000         0.003         0.001
  ENTG  CGCC 1022   000000 00              GAS      0.02  0.00  0.00  1891.   0.
  13.90  1.03  1.03     8031.      2925.     10955.    60.23    21.94    82.17
   0.602    0.219    0.822       0.000       0.000         4.361         1.189
  ENTGTXCGCC 1921   000000 00              GAS      0.13  0.00  0.00   440.   0.
  19.90  1.03  1.03       98.       546.       645.     0.54     2.98     3.52
   0.035    0.195    0.230       0.000       0.000         0.187         0.051
  ENTGTXCGCC 1922   000000 00              GAS      0.02  0.00  0.00   353.   0.
  13.90  1.03  1.03       79.       500.       579.     0.59     3.75     4.34
   0.006    0.037    0.043       0.000       0.000         0.230         0.063
  ENTGTXCGCC 2712   000000 00              GAS      0.02  0.00  0.00    25.   0.
  13.90  1.03  1.03      112.        86.       198.     0.84     0.64     1.48
   0.008    0.006    0.015       0.000       0.000         0.079         0.021
  ENTGTXCGCC 2722   000000 00              GAS      0.02  0.00  0.00   513.   0.
  13.90  1.03  1.03     1254.       793.      2048.     9.41     5.95    15.36
   0.094    0.060    0.154       0.000       0.000         0.815         0.222
Cgn_Oil                         24
Cgn_Other                       25
  ENTG  CGBIO00  51 000000 00              B1-: 0.6 0.02  0.08  0.57     8.   0.
  44.80  5.36  5.36       35.        27.        61.     0.30     0.23     0.52
   0.003    0.002    0.005       0.021       0.000         0.000         0.000
  ENTG  CGFWT102    000000 00              WASTE    0.42  0.00 20.87   170.   0.
 103.60  0.00  0.00      760.       580.      1340.     4.52     3.44     7.96
   0.939    0.716    1.656       0.000       0.083         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
  ENTG  TSASU1041292020110 01     LD01     BD1: 5.1 0.31  0.15  3.24  2871.  18.
```

```
  27.58  3.60  3.60    11916.      9464.     21380.   124.14    98.59   222.73
  19.428   15.430   34.858      16.705       0.361        20.741         5.657
Ret.ExistSCR & Scrub          38
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
  ENTGMOTSISU0541271010110 01     SCR2     SB1: 4.5 0.06  0.47  4.41   450.  10.
  29.10  2.52  2.52     1868.      1483.      3351.    18.84    14.96    33.81
   0.537    0.426    0.963       7.945       0.075         3.262         0.890
Ret.ExistScrub & SCR          41
  ENTGMOTSISS0541272020103 01     SCR1     SB2: 6.5 0.05  0.22  2.20   670.   7.
  41.00  3.80  3.80     2781.      2208.      4989.    27.95    22.19    50.14
   0.699    0.555    1.254       5.616       0.055         4.837         1.319
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  ENTG  TSASU1042292020110 01     RD01     BD1: 5.1 0.05  0.15  3.24   798.  24.
  27.58  4.55  4.55     3311.      2630.      5941.    36.32    28.85    65.17
   0.908    0.721    1.629       4.888       0.106         6.069         1.655
  ENTG  TSASU1041292020110 01     SCR1LD01 BD1: 5.1 0.05  0.15  3.24  1292.  25.
  27.99  4.46  4.46     5360.      4257.      9618.    55.84    44.35   100.20
   1.396    1.109    2.505       7.515       0.163         9.331         2.545
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-----------------------------------------------------------------------------
Year: 2020, Region: SPPN     (Emissions By Plant)
--------------------------------------------------
```

```
            NOx                  SO2         MER           CO2          Carbon

                      Generation                        Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
  SPPNMOTCOLA0541252020105 01              BG1: 8.0 0.01  0.25  0.80   540.   0.
  23.60  3.91  3.91     2241.      1780.      4021.    20.17    16.02    36.19
   0.111    0.088    0.199       4.524       0.015         3.370         0.919
  SPPNMOTSCSA0541282020306 01              SB2: 6.5 0.03  0.10  4.86   550.   0.
  43.30  3.91  3.91     2283.      1813.      4095.    23.55    18.71    42.26
   0.353    0.281    0.634       2.113       0.103         4.077         1.112
Scrubbed Coal                  2
  SPPNMOTSUBS0541272020103 01              BD1: 5.1 0.30  0.24  1.72   178.   0.
  42.70  2.94  2.94      739.       587.      1325.     7.68     6.10    13.78
   1.152    0.915    2.068       1.644       0.012         1.284         0.350
  SPPN  TSYBS1741281010703 01              BD1: 5.1 0.86  0.09  2.28   682.   0.
  42.70  2.94  2.94     2830.      2248.      5078.    29.87    23.72    53.59
  12.843   10.200   23.042       2.291       0.061         4.990         1.361
  SPPN  TSYBS1741282020703 01              BD1: 5.1 0.40  0.12  2.94   370.   0.
  42.70  2.94  2.94     1536.      1220.      2755.    15.72    12.49    28.21
   3.145    2.498    5.642       1.756       0.041         2.627         0.717
  SPPN  TSYBS1742282020703 01              BD1: 5.1 0.40  0.07  2.94   113.   0.
  43.00  2.94  2.94      469.       372.       841.     5.38     4.28     9.66
   1.077    0.855    1.932       0.333       0.014         0.900         0.245
  SPPN  TSYSS1741282020304 01              SB2: 6.5 0.28  0.08  4.86   331.   0.
  40.60  2.94  2.94     1374.      1091.      2465.    14.18    11.26    25.44
   2.013    1.599    3.612       1.017       0.062         2.454         0.669
  SPPN  TSYSS1742282020103 01              SB2: 6.5 0.40  0.14  5.44  2136.   0.
  40.60  2.94  2.94     8865.      7041.     15905.    97.18    77.19   174.37
  19.437   15.437   34.874      11.857       0.475        16.823         4.588
  SPPN  TSESS1741282020103 01              SB2: 6.5 0.50  0.34  5.44   668.   0.
  42.70  2.94  2.94     2772.      2202.      4974.    29.01    23.04    52.04
   7.252    5.759   13.011       8.926       0.142         5.021         1.369
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  SPPN  TCOLU1731281020310 01              BB2: 4.1 0.84  0.78  0.45    37.   0.
  32.00  1.54  1.54      154.       122.       276.     1.60     1.27     2.87
   0.671    0.533    1.203       1.123       0.001         0.267         0.073
  SPPN  TCOLU1731282020110 01              BB2: 4.1 0.46  0.78  2.62    38.   0.
  32.00  1.54  1.54      158.       125.       283.     1.64     1.30     2.94
   0.377    0.300    0.677       1.154       0.004         0.274         0.075
  SPPNMOTCOLU0511252050710 01              BB2: 4.1 0.48  1.00  4.10    43.   0.
  32.00  1.54  1.54      178.       142.       320.     1.86     1.47     3.33
   0.444    0.352    0.796       1.665       0.007         0.310         0.085
  SPPNMOTCOLU0511272050710 01              BB2: 4.1 0.48  1.00  4.10     8.   0.
  32.00  1.54  1.54       33.        26.        60.     0.35     0.27     0.62
   0.083    0.066    0.148       0.310       0.001         0.058         0.016
  SPPN  TOLBU1732282020110 01              BB2: 4.1 0.40  1.00  2.62   144.   0.
  32.00  1.54  1.54      598.       398.       995.     7.10     4.72    11.82
   1.419    0.944    2.363       5.909       0.016         1.100         0.300
  SPPN  TOLBU1742282020110 01              BB2: 4.1 0.40  1.00  2.62   148.   0.
  32.00  1.54  1.54      614.       488.      1102.     6.64     5.28    11.92
   1.329    1.055    2.384       5.960       0.016         1.110         0.303
  SPPNMOTOLBU0511281020110 01              SD2: 6.7 0.63  1.40  6.50    84.   0.
  32.00  1.54  1.54      349.       277.       625.     3.63     2.88     6.51
   1.142    0.907    2.049       4.554       0.021         0.628         0.171
  SPPNMOTOLBU0531281010110 01              BB2: 4.1 0.69  1.00  2.62    53.   0.
  32.00  1.54  1.54      184.       112.       297.     1.95     1.19     3.14
   0.671    0.409    1.080       1.572       0.004         0.293         0.080
```

```
  SPPNMOTOLBU0531281020110 01              BB2: 4.1 0.60  1.00  2.62    96.   0.
  32.00  1.54  1.54      334.       265.       599.     3.47     2.76     6.23
   1.046    0.831    1.878       3.114       0.008         0.580         0.158
  SPPNMOTOLBU0531282020110 01              BB2: 4.1 0.42  1.00  2.62    51.   0.
  32.00  1.54  1.54      212.       141.       352.     2.20     1.46     3.67
   0.458    0.305    0.762       1.833       0.005         0.341         0.093
  SPPNMOTSBSU0542282020110 01              SB2: 6.5 0.30  0.48  6.29   161.   0.
  32.00  1.54  1.54      668.       531.      1199.     7.14     5.67    12.82
   1.072    0.851    1.923       3.102       0.040         1.237         0.337
  SPPN  TSCBU1731282010310 01              BB2: 4.1 0.85  0.70  0.45    55.   0.
  32.00  1.54  1.54      228.       181.       410.     2.33     1.85     4.19
   0.997    0.792    1.790       1.473       0.001         0.390         0.106
  SPPN  TSCBU1732281010110 01              BB2: 4.1 1.01  1.00  2.62    73.   0.
  32.00  1.54  1.54      303.       241.       544.     3.29     2.61     5.90
   1.661    1.319    2.980       2.950       0.008         0.549         0.150
  SPPN  TSCBU1732282020110 01              BB2: 4.1 0.40  1.00  2.62    54.   0.
  32.00  1.54  1.54      224.       149.       373.     2.80     1.86     4.67
   0.560    0.373    0.933       2.333       0.006         0.434         0.118
  SPPN  TSESU1741282020110 01              SB2: 6.5 0.46  0.78  6.29   235.   0.
  22.40  1.54  1.54      975.       775.      1750.    10.11     8.03    18.15
   2.326    1.848    4.174       7.069       0.057         1.751         0.478
  SPPN  TSFBU1742282020110 01              BB2: 4.1 0.50  1.00  2.62   135.   0.
  26.40  1.54  1.54      560.       445.      1005.     6.25     4.96    11.21
   1.562    1.240    2.802       5.605       0.015         1.044         0.285
  SPPNMOTSGBU0511271020710 01              BG1: 8.0 0.95  5.00  8.04     6.   0.
  32.00  1.54  1.54       25.        20.        45.     0.26     0.21     0.46
   0.124    0.098    0.222       1.162       0.002         0.043         0.012
  SPPNMOTSLBU0531281020110 01              BB2: 4.1 0.53  1.00  2.62    97.   0.
  26.40  1.54  1.54      337.       268.       605.     3.51     2.79     6.29
   0.929    0.738    1.667       3.146       0.008         0.586         0.160
  SPPNMOTSUBU0541272020110 01              BB2: 4.1 0.30  0.12  2.62   222.   0.
  22.40  1.54  1.54      921.       732.      1653.     9.72     7.72    17.44
   1.473    1.170    2.642       1.081       0.023         1.624         0.443
Oil/Gas Steam                   5
Oil/Gas Steam_Nox               6
Nuclear                         7
  SPPN  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1182.   0.
 142.90  0.56  0.56     5668.      4084.      9752.    55.33    39.87    95.20
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                           8
  SPPN  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00   333.   0.
  15.10  0.00  0.00      601.       418.      1020.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                  9
  SPPNMOCC   0522   000000 00              GAS      0.02  0.00  0.00  1437.   0.
  13.90  1.03  1.03     3815.      2223.      6037.    28.61    16.67    45.28
   0.286    0.167    0.453       0.000       0.000         2.403         0.655
IGCC                           10
Turbine                        11
  SPPN  CT   1711   000000 00              GAS      0.10  0.00  0.00    17.   0.
   8.50  1.03  1.03       12.        26.        38.     0.11     0.24     0.34
   0.005    0.012    0.018       0.000       0.000         0.018         0.005
  SPPN  CT   1712   000000 00              GAS      0.10  0.00  0.00   214.   0.
   9.00  0.00  1.03        0.       111.       111.     0.00     1.19     1.19
   0.000    0.060    0.060       0.000       0.000         0.063         0.017
  SPPN  CT   1713   000000 00              GAS      0.10  0.00  0.00    90.   0.
   9.60  0.00  1.03        0.        16.        16.     0.00     0.21     0.21
   0.000    0.011    0.011       0.000       0.000         0.011         0.003
  SPPN  CT   1714   000000 00              GAS      0.10  0.00  0.00   493.   0.
  10.30  0.00  1.03        0.        85.        85.     0.00     1.21     1.21
   0.000    0.062    0.062       0.000       0.000         0.064         0.018
  SPPN  CT   1722   000000 00              GAS      0.09  0.00  0.00   353.   0.
   3.60  0.00  1.03        0.       183.       183.     0.00     2.03     2.03
   0.000    0.092    0.092       0.000       0.000         0.108         0.029
  SPPN  CT   1723   000000 00              GAS      0.11  0.00  0.00   637.   0.
```

```
  10.70  0.00  1.03        0.       287.       287.     0.00     3.65     3.65
   0.000    0.195    0.195       0.000       0.000         0.194         0.053
  SPPN  CT   1724   000000 00               GAS      0.10  0.00  0.00    81.   0.
   2.80  0.00  1.03        0.        14.        14.     0.00     0.20     0.20
   0.000    0.010    0.010       0.000       0.000         0.011         0.003
  SPPNMOCT   0511   000000 00               GAS      0.10  0.00  0.00     2.   0.
   7.80  1.03  1.03        1.         3.         4.     0.01     0.03     0.04
   0.001    0.001    0.002       0.000       0.000         0.002         0.001
  SPPNMOCT   0512   000000 00               GAS      0.11  0.00  0.00   103.   0.
  10.00  0.00  1.03        0.        53.        53.     0.00     0.55     0.55
   0.000    0.030    0.030       0.000       0.000         0.029         0.008
  SPPNMOCT   0513   000000 00               GAS      0.10  0.00  0.00    11.   0.
   7.80  0.00  1.03        0.         2.         2.     0.00     0.03     0.03
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  SPPNMOCT   0514   000000 00               GAS      0.11  0.00  0.00   309.   0.
  10.80  0.00  1.03        0.        53.        53.     0.00     0.76     0.76
   0.000    0.043    0.043       0.000       0.000         0.040         0.011
  SPPNMOCT   0522   000000 00               GAS      0.09  0.00  0.00  1320.   0.
   3.70  0.00  1.03        0.       683.       683.     0.00     7.49     7.49
   0.000    0.352    0.352       0.000       0.000         0.397         0.108
  SPPNMOCT   0523   000000 00               GAS      0.11  0.00  0.00   733.   0.
   9.40  0.00  1.03        0.       126.       126.     0.00     1.62     1.62
   0.000    0.092    0.092       0.000       0.000         0.086         0.023
  SPPNMOCT   0524   000000 00               GAS      0.11  0.00  0.00   288.   0.
   2.80  0.00  1.03        0.        50.        50.     0.00     0.71     0.71
   0.000    0.041    0.041       0.000       0.000         0.038         0.010
  SPPN  ACT  8     (b)                      GAS      0.10  0.00  0.00   869.  53.
   7.80  2.94  2.94      612.       604.      1216.     5.23     5.17    10.40
   0.261    0.258    0.520       0.000       0.000         0.552         0.150
Biomass                        12
Geothermal                     13
Landfill Gas                   14
Wind                           15
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
Fossil_Other                   19
Pump Storage                   20
  SPPN  PUMPS00     000000 00               NONE     0.00  0.00 71.00   155.   0.
   6.50  0.00  0.00       32.        37.        69.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
  SPPN  CGCT 1712   000000 00               GAS      0.08  0.00  0.00    15.   0.
   2.80  0.00  1.03        0.         8.         8.     0.00     0.08     0.08
   0.000    0.003    0.003       0.000       0.000         0.005         0.001
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
  SPPNMOTSJBU0541281010110 01     SCR2     BB2: 4.1 0.07  1.00  2.62   390.   8.
```

```
  26.80  2.46  2.46     1619.      1286.      2904.    15.70    12.47    28.17
   0.542    0.430    0.972      14.085       0.037         2.623         0.715
Ret.ExistScrub & SCR          41
  SPPNMOTSBSS0542282020103 01     SCR1     SB2: 6.5 0.05  0.40  2.20   308.  11.
  43.60  3.98  3.98     1278.      1015.      2293.    14.33    11.38    25.71
   0.358    0.285    0.643       5.168       0.028         2.481         0.677
  SPPNMOTSDSS0541282020103 01     SCR1     SB2: 6.5 0.05  0.30  2.20   670.   7.
  41.00  3.80  3.80     2781.      2208.      4989.    27.04    21.48    48.52
   0.676    0.537    1.213       7.181       0.053         4.682         1.277
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
  SPPNMOTOLSU0542281010110 01     SCR2ML01 SD2: 6.7 0.06  0.06  2.28   207.  40.
  39.08  3.64  3.64      857.       681.      1538.     9.89     7.86    17.75
   0.282    0.224    0.506       0.497       0.020         1.712         0.467
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: SPPS     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
```

```
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  SPPS  TSXSS3642282020104 01              SB2: 6.5 0.31  0.13  4.21   520.   0.
  40.60  2.94  2.94     2158.      1714.      3872.    23.20    18.43    41.63
   3.608    2.865    6.473       2.768       0.088         4.016         1.095
Unscrubbed Coal_NOx            3
  SPPS  TSASN3642282020102 01              SB2: 6.5 0.45  0.73  6.29   490.   0.
  22.60  2.45  2.45     2034.      1615.      3649.    21.76    17.28    39.03
   4.938    3.922    8.861      14.247       0.123         3.766         1.027
Unscrubbed Coal                4
  SPPSTXTCOLU3531292050710 01              BB1: 3.4 0.32  1.00  3.41    26.   0.
  22.40  1.54  1.54      108.        86.       194.     1.12     0.89     2.01
   0.181    0.144    0.325       1.007       0.003         0.188         0.051
  SPPS  TSASU3641282020110 01              SB2: 6.5 0.39  0.73  6.29  3838.   0.
  23.00  1.54  1.54    15928.     12651.     28579.   161.43   128.21   289.65
  31.641   25.130   56.771     105.287       0.910        27.945         7.621
  SPPSTXTSASU3541292020110 01              SB2: 6.5 0.26  0.61  6.29   346.   0.
  26.40  1.54  1.54     1436.      1140.      2576.    14.25    11.32    25.57
   1.824    1.449    3.273       7.811       0.080         2.467         0.673
  SPPSTXTSASU3541292020310 01              SB2: 6.5 0.33  0.63  1.75  1800.   0.
  22.40  1.54  1.54     7470.      5933.     13403.    73.17    58.11   131.29
  12.256    9.734   21.990      41.224       0.115        12.666         3.454
Oil/Gas Steam                  5
  SPPS  STLSU0821   000000 00              GAS      0.19  0.00  0.00   314.   0.
  21.40  0.00  2.57        0.       331.       331.     0.00     3.34     3.34
   0.000    0.319    0.319       0.000       0.000         0.177         0.048
  SPPS  STLSU3621   000000 00              GAS      0.28  0.00  0.00  4755.   0.
  20.10  0.00  2.57        0.      5013.      5013.     0.00    49.90    49.90
   0.000    7.085    7.085       0.000       0.000         2.648         0.722
  SPPSTXSTLSU2521   000000 00              GAS      0.22  0.00  0.00  1134.   0.
  20.30  0.00  2.57        0.      1195.      1195.     0.00    12.14    12.14
   0.000    1.335    1.335       0.000       0.000         0.644         0.176
Oil/Gas Steam_Nox              6
Nuclear                        7
Hydro                          8
  SPPS  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2445.   0.
  15.00  0.00  0.00     4702.      3448.      8150.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  SPPS  CC   1022   000000 00              GAS      0.02  0.00  0.00   912.   0.
  13.90  1.03  1.03     4087.      3135.      7223.    30.66    23.51    54.17
   0.307    0.235    0.542       0.000       0.000         2.875         0.784
  SPPS  CC   3613   000000 00              GAS      0.14  0.00  0.00    40.   0.
  19.40  1.03  1.03        9.        21.        30.     0.09     0.22     0.31
   0.007    0.015    0.022       0.000       0.000         0.017         0.005
  SPPS  CC   3622   000000 00              GAS      0.03  0.00  0.00  6283.   0.
  14.00  1.03  1.03    16161.     16677.     32838.   122.82   126.74   249.57
   2.088    2.155    4.243       0.000       0.000        13.245         3.612
  SPPS  CC   3623   000000 00              GAS      0.14  0.00  0.00   219.   0.
  19.90  1.03  1.03       49.       113.       162.     0.49     1.12     1.61
   0.035    0.080    0.115       0.000       0.000         0.086         0.023
  SPPS  CC   3624   000000 00              GAS      0.10  0.00  0.00    39.   0.
  13.90  0.00  1.03        0.         7.         7.     0.00     0.10     0.10
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  SPPSMSCC   1613   000000 00              GAS      0.17  0.00  0.00    50.   0.
  19.80  1.03  1.03       11.        26.        37.     0.11     0.26     0.38
   0.010    0.023    0.033       0.000       0.000         0.020         0.005
  SPPSTXCC   2322   000000 00              GAS      0.02  0.00  0.00   745.   0.
  13.90  1.03  1.03     3339.      2561.      5900.    25.04    19.21    44.25
   0.250    0.192    0.443       0.000       0.000         2.348         0.640
  SPPSTXCC   2722   000000 00              GAS      0.02  0.00  0.00  1140.   0.
```

```
  13.90  1.03  1.03     5109.      3919.      9028.    38.32    29.39    67.71
   0.383    0.294    0.677       0.000       0.000         3.594         0.980
  SPPSTXCC   3522   000000 00              GAS      0.02  0.00  0.00   551.   0.
  13.90  1.03  1.03     2469.      1894.      4364.    18.52    14.21    32.73
   0.185    0.142    0.327       0.000       0.000         1.737         0.474
IGCC                           10
Turbine                        11
  SPPS  CT   0812   000000 00              GAS      0.13  0.00  0.00     6.   0.
  11.20  1.03  1.03        1.         3.         4.     0.01     0.03     0.05
   0.001    0.002    0.003       0.000       0.000         0.003         0.001
  SPPS  CT   0814   000000 00              GAS      0.11  0.00  0.00    35.   0.
  11.20  0.00  1.03        0.         6.         6.     0.00     0.09     0.09
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  SPPS  CT   0823   000000 00              GAS      0.10  0.00  0.00    66.   0.
  11.20  0.00  1.03        0.        11.        11.     0.00     0.14     0.14
   0.000    0.007    0.007       0.000       0.000         0.008         0.002
  SPPS  CT   0824   000000 00              GAS      0.11  0.00  0.00   244.   0.
   2.80  0.00  1.03        0.        42.        42.     0.00     0.60     0.60
   0.000    0.033    0.033       0.000       0.000         0.032         0.009
  SPPS  CT   1012   000000 00              GAS      0.10  0.00  0.00     9.   0.
   9.30  1.03  1.03        2.         5.         7.     0.02     0.05     0.07
   0.001    0.002    0.003       0.000       0.000         0.004         0.001
  SPPS  CT   1014   000000 00              GAS      0.11  0.00  0.00    76.   0.
  10.40  0.00  1.03        0.        13.        13.     0.00     0.19     0.19
   0.000    0.011    0.011       0.000       0.000         0.010         0.003
  SPPS  CT   1022   000000 00              GAS      0.08  0.00  0.00   457.   0.
   2.80  1.03  1.03       11.        79.        90.     0.12     0.86     0.98
   0.005    0.034    0.039       0.000       0.000         0.052         0.014
  SPPS  CT   3612   000000 00              GAS      0.11  0.00  0.00    11.   0.
   9.90  1.03  1.03        3.         6.         8.     0.03     0.06     0.09
   0.001    0.003    0.005       0.000       0.000         0.005         0.001
  SPPS  CT   3614   000000 00              GAS      0.11  0.00  0.00   161.   0.
  11.00  0.00  1.03        0.        28.        28.     0.00     0.40     0.40
   0.000    0.021    0.021       0.000       0.000         0.021         0.006
  SPPS  CT   3622   000000 00              GAS      0.08  0.00  0.00   512.   0.
   2.80  1.03  1.03      118.        88.       207.     1.29     0.96     2.26
   0.052    0.039    0.090       0.000       0.000         0.120         0.033
  SPPS  CT   3623   000000 00              GAS      0.10  0.00  0.00    53.   0.
  11.20  0.00  1.03        0.         9.         9.     0.00     0.13     0.13
   0.000    0.006    0.006       0.000       0.000         0.007         0.002
  SPPS  CT   3624   000000 00              GAS      0.10  0.00  0.00   162.   0.
  11.20  0.00  1.03        0.        28.        28.     0.00     0.40     0.40
   0.000    0.021    0.021       0.000       0.000         0.021         0.006
  SPPSMSCT   1614   000000 00              GAS      0.10  0.00  0.00    15.   0.
  11.20  0.00  1.03        0.         3.         3.     0.00     0.04     0.04
   0.000    0.002    0.002       0.000       0.000         0.002         0.001
  SPPSTXCT   2214   000000 00              GAS      0.10  0.00  0.00    40.   0.
  11.20  0.00  1.03        0.         7.         7.     0.00     0.10     0.10
   0.000    0.005    0.005       0.000       0.000         0.005         0.001
  SPPSTXCT   2322   000000 00              GAS      0.08  0.00  0.00   100.   0.
   2.80  0.00  1.03        0.        17.        17.     0.00     0.19     0.19
   0.000    0.008    0.008       0.000       0.000         0.010         0.003
  SPPSTXCT   2512   000000 00              GAS      0.10  0.00  0.00     3.   0.
  11.20  1.03  1.03        1.         1.         1.     0.01     0.01     0.01
   0.000    0.000    0.001       0.000       0.000         0.001         0.000
  SPPSTXCT   2513   000000 00              GAS      0.10  0.00  0.00     5.   0.
  11.20  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.001    0.001       0.000       0.000         0.001         0.000
  SPPSTXCT   2514   000000 00              GAS      0.10  0.00  0.00    47.   0.
  11.20  0.00  1.03        0.         8.         8.     0.00     0.12     0.12
   0.000    0.006    0.006       0.000       0.000         0.006         0.002
  SPPSTXCT   2524   000000 00              GAS      0.10  0.00  0.00    48.   0.
  11.20  0.00  1.03        0.         8.         8.     0.00     0.12     0.12
   0.000    0.006    0.006       0.000       0.000         0.006         0.002
  SPPSTXCT   2722   000000 00              GAS      0.08  0.00  0.00    95.   0.
```

```
   2.80  0.00  1.03        0.        16.        16.     0.00     0.18     0.18
   0.000    0.007    0.007       0.000       0.000         0.009         0.003
  SPPSTXCT   3513   000000 00              GAS      0.10  0.00  0.00     2.   0.
   7.80  0.00  1.03        0.         0.         0.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SPPSTXCT   3514   000000 00              GAS      0.10  0.00  0.00    43.   0.
  11.20  0.00  1.03        0.         7.         7.     0.00     0.11     0.11
   0.000    0.005    0.005       0.000       0.000         0.006         0.002
  SPPS  ACT  8     (b)                     GAS      0.10  0.00  0.00  1200.  53.
   7.80  2.94  2.94      281.      1828.      2109.     2.40    15.63    18.04
   0.120    0.782    0.902       0.000       0.000         0.957         0.261
Biomass                        12
Geothermal                     13
Landfill Gas                   14
  SPPS  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     9.   0.
  78.60 10.48 10.48       40.        31.        71.     0.55     0.42     0.97
   0.068    0.052    0.119       0.000       0.000         0.000         0.000
Wind                           15
  SPPS  WIND 00     000000 00              NONE     0.00  0.00 71.00    66.   0.
  26.40  0.00  0.00       66.        37.       102.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
Non Fossil_Other               18
  SPPS  OTHER00     000000 00              NONE     0.00  0.00  0.00    13.   0.
 103.60  0.00  0.00       57.        45.       102.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  SPPS  OTHER00     000000 00              NONE     0.00  0.00  0.00    10.   0.
 103.60  0.00  0.00       44.        35.        79.     0.48     0.38     0.87
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fossil_Other                   19
Pump Storage                   20
  SPPS  PUMPS00     000000 00              NONE     0.00  0.00 71.00   288.   0.
   6.50  0.00  0.00        0.        43.        43.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
  SPPS  CGCOU3641282050710 01              BB1: 3.4 0.39  1.00  3.41   307.   0.
  16.70  1.54  1.54     1243.      1003.      2246.    10.63     8.57    19.20
   2.067    1.668    3.734       9.600       0.033         1.788         0.488
Cgn_Gas                        23
  SPPS  CGCT 1012   000000 00              GAS      0.09  0.00  0.00     4.   0.
   2.80  1.03  1.03        1.         2.         3.     0.01     0.02     0.03
   0.000    0.001    0.001       0.000       0.000         0.002         0.000
  SPPS  CGCT 3612   000000 00              GAS      0.11  0.00  0.00    43.   0.
   7.80  1.03  1.03       10.        67.        77.     0.09     0.64     0.73
   0.005    0.034    0.039       0.000       0.000         0.039         0.011
  SPPS  CGCT 3622   000000 00              GAS      0.11  0.00  0.00    55.   0.
   2.80  1.03  1.03       13.        59.        72.     0.13     0.58     0.71
   0.007    0.031    0.038       0.000       0.000         0.037         0.010
  SPPSTXCGCT 3512   000000 00              GAS      0.10  0.00  0.00    20.   0.
   7.80  1.03  1.03        5.        31.        36.     0.04     0.30     0.34
   0.002    0.015    0.017       0.000       0.000         0.018         0.005
  SPPSTXCGCT 3522   000000 00              GAS      0.10  0.00  0.00   254.   0.
   2.80  1.03  1.03       59.       395.       454.     0.56     3.77     4.33
   0.028    0.190    0.219       0.000       0.000         0.230         0.063
  SPPS  CGCC 1022   000000 00              GAS      0.02  0.00  0.00   448.   0.
  13.90  1.03  1.03     1727.      1540.      3267.    12.95    11.55    24.50
   0.130    0.116    0.245       0.000       0.000         1.300         0.355
  SPPS  CGCC 3622   000000 00              GAS      0.02  0.00  0.00   450.   0.
  13.90  1.03  1.03     2017.      1547.      3564.    15.13    11.60    26.73
   0.151    0.116    0.267       0.000       0.000         1.418         0.387
  SPPS  CGCC 3623   000000 00              GAS      0.18  0.00  0.00   108.   0.
  18.90  1.03  1.03       24.        56.        80.     0.24     0.55     0.79
   0.022    0.050    0.072       0.000       0.000         0.042         0.011
```

```
Cgn_Oil                        24
Cgn_Other                      25
  SPPS  CGBIO00  51 000000 00              B1-: 0.6 0.02  0.08  0.57     2.   0.
  44.80  5.36  5.36        9.         7.        15.     0.07     0.06     0.13
   0.001    0.001    0.001       0.005       0.000         0.000         0.000
  SPPS  CGOTH00     000000 00              NONE     0.00  0.00  0.00    34.   0.
 103.60  0.00  0.00      147.       114.       261.     0.59     0.45     1.04
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
  SPPS  TSASU1041292020210 01     RL02     BD1: 5.1 0.05  0.06  0.51   982.  31.
  31.98  3.43  3.43     4075.      3237.      7312.    41.80    33.20    75.01
   1.045    0.830    1.875       2.250       0.019         6.985         1.905
  SPPSTXTSASU2341292020210 01     ML02SCR1 BD1: 5.1 0.05  0.06  0.51  1034.  30.
  33.92  3.45  3.45     4291.      3408.      7698.    44.80    35.58    80.38
   1.120    0.889    2.009       2.411       0.020         7.485         2.041
  SPPSTXTSASU2342292020210 01     ML02SCR1 BD1: 5.1 0.05  0.06  0.51   517.  31.
  31.98  3.48  3.48     2145.      1704.      3849.    23.33    18.53    41.86
   0.583    0.463    1.047       1.256       0.011         3.898         1.063
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
```

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation reported in BBtu

---

Year: 2020, Region: CALI (Emissions By Plant)

NOx SO2 MER CO2 Carbon

Generation Trillion

Emission Emission Emission Emission Emission

(lb/MBtu)(lb/TBtu)(MW) $

/KWyr VOM Mill/KWh (GWh) (Btu)

(1000 Tons) (1000 Tons) (Tons) (Mil Tonnes)(Mil Tonnes)

Unit Fuel NOx SO2 MERCURY Cap. Cap

. FO&M WINT. SUMM. WINTER SUMMER Total WINTER SUMMER Total

WINTER SUMMER Total Total Total Total Total

Scrubbed Coal_NOx 1

Scrubbed Coal 2

Unscrubbed Coal_NOx 3

Unscrubbed Coal 4

CALI TCOLU0811372050710 01 BB2: 4.1 0.09 1.00 4.10 113. 0.

17.90 1.54 1.54 469. 372. 841. 4.88 3.87 8.75

0.219 0.174 0.394 4.375 0.018 0.815 0.222

CALI TCOLU0832372050710 01 BB2: 4.1 0.40 1.00 4.10 58. 0.

26.40 1.54 1.54 241. 191. 432. 2.91 2.31 5.22

0.582 0.462 1.045 2.611 0.011 0.486 0.133

Oil/Gas Steam 5

CALI STLSU0821 000000 00 GAS 0.02 0.00 0.00 5179. 0.

20.90 0.00 2.57 0. 1865. 1865. 0.00 17.78 17.78

0.000 0.178 0.178 0.000 0.000 0.944 0.257

Oil/Gas Steam_Nox 6

Nuclear 7

CALI NUKE 00 7000000 00 NUC 0.00 0.00 0.00 1086. 0.

190.30 0.86 0.86 5191. 3888. 9079. 51.32 38.44 89.76

0.000 0.000 0.000 0.000 0.000 0.000 0.000

CALI NUKE 00 7000000 00 NUC 0.00 0.00 0.00 1095. 0.

145.90 0.62 0.62 5037. 3751. 8789. 52.66 39.22 91.88

0.000 0.000 0.000 0.000 0.000 0.000 0.000

CALI NUKE 00 7000000 00 NUC 0.00 0.00 0.00 1109. 0.

145.90 0.62 0.62 5642. 3429. 9071. 59.26 36.01 95.27

0.000 0.000 0.000 0.000 0.000 0.000 0.000

CALI NUKE 00 7000000 00 NUC 0.00 0.00 0.00 1096. 0.

190.30 0.86 0.86 4371. 4020. 8391. 43.21 39.75 82.96

0.000 0.000 0.000 0.000 0.000 0.000 0.000

Hydro 8

CALI HYDRO00 000000 00 HYDRO 0.00 0.00 0.00 11313. 0.

15.00 0.00 0.00 16750. 17655. 34405. 0.00 0.00 0.00

0.000 0.000 0.000 0.000 0.000 0.000 0.000

Comb.Cycle Gas 9

CALI CC 0812 000000 00 GAS 0.10 0.00 0.00 40. 0.

19.90 1.03 1.03 134. 21. 155. 1.18 0.18 1.36

0.059 0.009 0.068 0.000 0.000 0.072 0.020

CALI CC 0813 000000 00 GAS 0.02 0.00 0.00 65. 0.

19.40 0.00 1.03 0. 11. 11. 0.00 0.12 0.12

0.000 0.001 0.001 0.000 0.000 0.007 0.002

CALI CC 0822 000000 00 GAS 0.02 0.00 0.00 5856. 0.

```
  13.90  1.03  1.03    26245.     20132.     46377.   197.65   151.61   349.27
   1.977    1.516    3.493       0.000       0.000        18.536         5.055
  CALI  CC   0823   000000 00              GAS      0.02  0.00  0.00   513.   0.
  19.40  1.03  1.03       98.       264.       362.     1.00     2.71     3.71
   0.009    0.024    0.033       0.000       0.000         0.197         0.054
  CALI  CC   0824   000000 00              GAS      0.02  0.00  0.00   272.   0.
  19.90  0.00  1.03        0.        47.        47.     0.00     0.55     0.55
   0.000    0.004    0.004       0.000       0.000         0.029         0.008
  CALI  CC   8     (b)                     GAS      0.02  0.00  0.00 13262.  73.
  11.70  1.95  1.95    60994.     44019.    105013.   430.37   310.60   740.97
   4.304    3.106    7.410       0.000       0.000        39.323        10.725
IGCC                           10
Turbine                        11
  CALI  CT   0812   000000 00              GAS      0.13  0.00  0.00     3.   0.
   9.50  0.00  1.03        0.         1.         1.     0.00     0.01     0.01
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  CALI  CT   0813   000000 00              GAS      0.11  0.00  0.00   203.   0.
   9.50  0.00  1.03        0.        35.        35.     0.00     0.46     0.46
   0.000    0.025    0.025       0.000       0.000         0.024         0.007
  CALI  CT   0814   000000 00              GAS      0.10  0.00  0.00   550.   0.
  10.10  0.00  1.03        0.        65.        65.     0.00     0.93     0.93
   0.000    0.046    0.046       0.000       0.000         0.049         0.013
  CALI  CT   0821   000000 00              GAS      0.10  0.00  0.00    48.   0.
   2.80  1.03  1.03      167.        25.       192.     1.53     0.23     1.76
   0.078    0.012    0.090       0.000       0.000         0.094         0.026
  CALI  CT   0822   000000 00              GAS      0.08  0.00  0.00  2209.   0.
   2.80  0.00  1.03        0.       380.       380.     0.00     4.16     4.16
   0.000    0.166    0.166       0.000       0.000         0.221         0.060
  CALI  CT   0823   000000 00              GAS      0.07  0.00  0.00   927.   0.
  10.30  0.00  1.03        0.       160.       160.     0.00     2.02     2.02
   0.000    0.072    0.072       0.000       0.000         0.107         0.029
Biomass                        12
  CALI  BIOMS00  54 000000 00              B1-: 0.6 0.02  0.08  0.57   432.   0.
  44.80  5.36  5.36     1872.      1447.      3319.    17.09    13.21    30.30
   0.171    0.132    0.303       1.212       0.009         0.000         0.000
Geothermal                     13
  CALI  GEO  00     000000 00              GEOTH    0.00  0.00  2.97  2665.   0.
  87.40  0.00  0.00    11344.      8966.     20310.   291.69   230.53   522.21
   0.000    0.000    0.000       0.000       0.775         0.000         0.000
Landfill Gas                   14
  CALI  LFGAS00     000000 00              WASTE    0.25  0.00  0.00   216.   0.
  78.60 10.48 10.48      966.       737.      1703.    12.24     9.34    21.58
   1.506    1.148    2.654       0.000       0.000         0.000         0.000
Wind                           15
  CALI  WIND 00     000000 00              NONE     0.00  0.00 71.00  1931.   0.
  26.40  0.00  0.00     4635.      2599.      7234.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
  CALI  SOLAR00     000000 00              NONE     0.00  0.00 71.00   324.   0.
  47.00  0.00  0.00      516.       274.       790.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other               18
  CALI  OTHER00     000000 00              NONE     0.00  0.00 27.90   178.   0.
 103.60  0.00  0.00      785.       619.      1403.     9.00     7.10    16.10
   0.000    0.000    0.000       0.000       0.225         0.000         0.000
Fossil_Other                   19
  CALI  WASTE081    000000 00              WASTE    0.13  0.00  0.00    20.   0.
 103.60  0.00  0.00       89.        68.       158.     0.98     0.75     1.73
   0.064    0.049    0.114       0.000       0.000         0.000         0.000
Pump Storage                   20
  CALI  PUMPS00     000000 00              NONE     0.00  0.00 71.00  4432.   0.
   6.50  0.00  0.00        0.       428.       428.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
```

```
Cgn_Coal                        22
  CALI  CGCOU0811372050710 01              BB2: 4.1 0.09  1.00  4.10    68.   0.
  20.50  1.54  1.54      275.       222.       497.     2.47     1.99     4.46
   0.111    0.090    0.200       2.228       0.009         0.415         0.113
  CALI  CGCOU0831372050710 01              BB2: 4.1 0.09  1.00  4.10   153.   0.
  16.70  1.54  1.54      619.       500.      1119.     5.37     4.34     9.71
   0.242    0.195    0.437       4.854       0.020         0.904         0.247
  CALI  CGCOU0832372050710 01              BB2: 4.1 0.09  1.00  4.10    69.   0.
  16.70  1.54  1.54      279.       225.       505.     3.05     2.46     5.51
   0.137    0.111    0.248       2.753       0.011         0.513         0.140
  CALI  CGCOD0831372050307 01              BD1: 5.1 0.09  0.36  0.15    45.   0.
  40.80  3.84  3.84      182.       147.       329.     1.49     1.20     2.69
   0.067    0.054    0.121       0.484       0.000         0.250         0.068
Cgn_Gas                         23
  CALI  CGCT 0811   000000 00              GAS      0.09  0.00  0.00    25.   0.
   7.80  1.03  1.03       87.        65.       152.     0.74     0.56     1.30
   0.034    0.026    0.060       0.000       0.000         0.069         0.019
  CALI  CGCT 0812   000000 00              GAS      0.09  0.00  0.00   369.   0.
   8.30  1.03  1.03     1281.       191.      1472.    12.33     1.84    14.17
   0.567    0.085    0.652       0.000       0.000         0.752         0.205
  CALI  CGCT 0821   000000 00              GAS      0.09  0.00  0.00   162.   0.
   7.80  1.03  1.03      562.       420.       982.     4.77     3.56     8.33
   0.220    0.164    0.383       0.000       0.000         0.442         0.121
  CALI  CGCT 0822   000000 00              GAS      0.09  0.00  0.00  2348.   0.
   7.90  1.03  1.03     3552.      1215.      4768.    35.84    12.26    48.10
   1.649    0.564    2.213       0.000       0.000         2.553         0.696
  CALI  CGCC 0811   000000 00              GAS      0.02  0.00  0.00     1.   0.
  13.90  1.03  1.03        4.         3.         8.     0.03     0.02     0.05
   0.000    0.000    0.000       0.000       0.000         0.003         0.001
  CALI  CGCC 0812   000000 00              GAS      0.02  0.00  0.00   213.   0.
  19.20  1.03  1.03      955.       549.      1504.     7.95     4.57    12.52
   0.072    0.041    0.113       0.000       0.000         0.664         0.181
  CALI  CGCC 0813   000000 00              GAS      0.02  0.00  0.00   319.   0.
  19.50  1.03  1.03     1072.       164.      1237.    10.35     1.59    11.94
   0.093    0.014    0.107       0.000       0.000         0.634         0.173
  CALI  CGCC 0822   000000 00              GAS      0.02  0.00  0.00  2938.   0.
  13.90  1.03  1.03    13168.      7754.     20922.   100.71    59.30   160.01
   1.007    0.593    1.600       0.000       0.000         8.492         2.316
  CALI  CGCC 0823   000000 00              GAS      0.02  0.00  0.00   840.   0.
  19.60  1.03  1.03     2824.       433.      3256.    27.35     4.19    31.54
   0.246    0.038    0.284       0.000       0.000         1.674         0.456
Cgn_Oil                         24
  CALI  CGLSN0821   000000 00              GAS      0.02  0.00  0.00   430.   0.
  21.60  3.02  3.02     1741.      1124.      2864.    13.16     8.50    21.66
   0.099    0.064    0.162       0.000       0.000         1.150         0.314
Cgn_Other                       25
  CALI  CGBIO00  54 000000 00              B1-: 0.6 0.02  0.08  0.57    74.   0.
  44.80  5.36  5.36      321.       248.       569.     2.80     2.17     4.97
   0.028    0.022    0.050       0.199       0.001         0.000         0.000
  CALI  CGFWT082    000000 00              WASTE    0.13  0.02 20.87    29.   0.
 103.60  0.00  0.00      130.        99.       229.     0.77     0.59     1.36
   0.050    0.038    0.089       0.011       0.014         0.000         0.000
  CALI  CGOTH00     000000 00              NONE     0.00  0.00  0.00    29.   0.
 103.60  0.00  0.00      126.        97.       223.     0.53     0.41     0.93
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
```

```
  CALI  STGAU0811   000000 00     OC01     GAS      0.02  0.00  0.00    80.  63.
  11.70  1.95  1.95      359.       275.       634.     2.59     1.99     4.57
   0.026    0.020    0.046       0.000       0.000         0.243         0.066
  CALI  STGAU0821   000000 00     OC01     GAS      0.02  0.00  0.00   144.  63.
  11.70  1.95  1.95      645.       495.      1139.     4.65     3.57     8.23
   0.047    0.036    0.082       0.000       0.000         0.437         0.119
  CALI  STLSC0821   000000 00     OC01     GAS      0.02  0.00  0.00    62.  63.
  11.70  1.95  1.95      278.       213.       491.     2.01     1.54     3.55
   0.020    0.015    0.035       0.000       0.000         0.188         0.051
  CALI  STHSC0821   000000 00     OC01     GAS      0.02  0.00  0.00  3941.  63.
  11.70  1.95  1.95    17665.     13550.     31214.   127.54    97.83   225.37
   1.275    0.978    2.254       0.000       0.000        11.960         3.262
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: PNW      (Emissions By Plant)
--------------------------------------------------
```

```
            NOx                  SO2         MER           CO2          Carbon

                      Generation                        Trillion
         Emission             Emission    Emission      Emission       Emission
                                                       (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                           (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total          Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  PNW WATSBSS0741372020103 01              SE1: 5.5 0.40  0.11  4.65  1340.   0.
  42.70  2.94  2.94     5561.      4417.      9978.    56.95    45.23   102.17
  11.389    9.046   20.435       5.364       0.237         9.858         2.688
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  PNW   TABU 0711371030710 01              BD1: 5.1 0.90  0.61  5.07    25.   0.
  32.00  1.54  1.54      104.        82.       186.     1.08     0.86     1.94
   0.483    0.384    0.866       0.595       0.005         0.180         0.049
  PNW ORTSASU0842372020110 01              SB1: 4.5 0.42  0.74  4.41   508.   0.
  22.40  1.54  1.54     2108.      1674.      3783.    22.85    18.14    40.99
   4.798    3.810    8.608      15.187       0.090         3.955         1.079
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  PNW   NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1123.   0.
 153.70  0.66  0.66     5713.      3138.      8851.    57.49    31.58    89.07
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  PNW   HYDRO00     000000 00              HYDRO    0.00  0.00  0.00 42633.   0.
  14.80  0.00  0.00    63340.     47747.    111087.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  PNW   CC   0722   000000 00              GAS      0.03  0.00  0.00  1512.   0.
  13.90  1.03  1.03     6776.      5198.     11974.    51.93    39.84    91.77
   0.727    0.558    1.285       0.000       0.000         4.870         1.328
  PNW   CC   0822   000000 00              GAS      0.06  0.00  0.00  1533.   0.
  13.90  1.03  1.03     6871.      5270.     12141.    54.27    41.63    95.90
   1.520    1.166    2.685       0.000       0.000         5.089         1.388
  PNW   CC   8     (b)                     GAS      0.02  0.00  0.00  4152.  71.
  11.70  1.95  1.95    19097.     13783.     32880.   134.75    97.25   232.00
   1.348    0.972    2.320       0.000       0.000        12.312         3.358
IGCC                          10
Turbine                       11
  PNW   CT   0722   000000 00              GAS      0.09  0.00  0.00  1151.   0.
   2.80  0.00  1.03        0.      1198.      1198.     0.00    12.93    12.93
   0.000    0.588    0.588       0.000       0.000         0.686         0.187
  PNW   CT   0812   000000 00              GAS      0.13  0.00  0.00     3.   0.
   2.80  1.03  1.03       14.        10.        24.     0.13     0.10     0.23
   0.008    0.006    0.015       0.000       0.000         0.012         0.003
  PNW   CT   0822   000000 00              GAS      0.09  0.00  0.00   371.   0.
   2.80  0.00  1.03        0.      1282.      1282.     0.00    13.74    13.74
   0.000    0.605    0.605       0.000       0.000         0.729         0.199
Biomass                       12
  PNW   BIOMS00  52 000000 00              B1-: 0.6 0.02  0.08  0.57     6.   0.
  44.80  5.36  5.36       26.        20.        46.     0.21     0.16     0.37
   0.002    0.002    0.004       0.015       0.000         0.000         0.000
Geothermal                    13
  PNW   GEO  00     000000 00              GEOTH    0.00  0.00  3.70     8.   0.
  87.40  0.00  0.00       34.        27.        61.     1.10     0.87     1.97
   0.000    0.000    0.000       0.000       0.004         0.000         0.000
Landfill Gas                  14
  PNW   LFGAS00     000000 00              WASTE    0.25  0.00  0.00    21.   0.
  78.60 10.48 10.48       94.        72.       166.     1.28     0.98     2.26
```

```
   0.158    0.120    0.278       0.000       0.000         0.000         0.000
Wind                            15
  PNW   WIND 00     000000 00              NONE     0.00  0.00 71.00   412.   0.
  26.40  0.00  0.00      185.       104.       290.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
Non Fossil_Other                18
  PNW   OTHER00     000000 00              NONE     0.00  0.00 40.61    58.   0.
 103.60  0.00  0.00      256.       202.       457.     2.81     2.22     5.03
   0.000    0.000    0.000       0.000       0.102         0.000         0.000
Fossil_Other                    19
Pump Storage                    20
Int. Imports                    21
  PNW   WAIMP00     000000 00              NONE     0.00  0.00 71.00  2000.   0.
   0.00  0.00  0.00     7785.      5618.     13403.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Cgn_Coal                        22
Cgn_Gas                         23
  PNW   CGCC 0722   000000 00              GAS      0.07  0.00  0.00   165.   0.
  13.90  1.03  1.03      739.       567.      1307.     5.34     4.09     9.43
   0.181    0.139    0.321       0.000       0.000         0.501         0.137
  PNW   CGCC 0723   000000 00              GAS      0.07  0.00  0.00   123.   0.
  13.90  1.03  1.03      551.       423.       974.     5.42     4.16     9.57
   0.184    0.141    0.326       0.000       0.000         0.508         0.139
  PNW   CGCC 0812   000000 00              GAS      0.08  0.00  0.00    13.   0.
  13.90  1.03  1.03       58.        45.       103.     0.45     0.35     0.80
   0.017    0.013    0.031       0.000       0.000         0.042         0.012
  PNW   CGCC 0822   000000 00              GAS      0.05  0.00  0.00   820.   0.
  13.90  1.03  1.03     3675.      2819.      6494.    28.03    21.50    49.53
   0.743    0.570    1.313       0.000       0.000         2.629         0.717
Cgn_Oil                         24
Cgn_Other                       25
  PNW   CGBIO00  52 000000 00              B1-: 0.6 0.02  0.08  0.57    96.   0.
  44.80  5.36  5.36      416.       321.       738.     3.55     2.75     6.30
   0.036    0.027    0.063       0.252       0.002         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
  PNW   STLSU0721   000000 00     OC01     GAS      0.02  0.00  0.00    94.  59.
  11.70  1.95  1.95      421.       323.       744.     3.04     2.33     5.37
   0.030    0.023    0.054       0.000       0.000         0.285         0.078
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
Ret.ExistScrub & SCR            41
Ret.SNCR                        42
Ret.ExistScrub & SNCR           43
Ret.SCR+Scrb                    44
Ret.SNCR+Scrub                  45
Ret.Gas Reburn                  46
Ret.ExistScrub+GasR             47
Ret.GasReburn+Scrub             48
Ret.ACI                         49
Ret.ExistScrub&ACI              50
Ret.ExistSCR&ACI                51
```

```
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------
Year: 2020, Region: AZNM     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  AZNM  TSUBS0841361020203 01              BD1: 5.1 0.46  0.10  2.94   365.   0.
  40.60  2.94  2.94     1515.      1203.      2718.    15.47    12.29    27.76
   3.559    2.826    6.385       1.333       0.041         2.585         0.705
  AZNM  TSUBS0841352020203 01              BD1: 5.1 0.40  0.07  2.94  2250.   0.
  42.70  2.94  2.94     9338.      7416.     16754.    90.64    71.99   162.63
  18.128   14.398   32.526       5.489       0.239        15.145         4.130
  AZNM  TSUBS0841362020203 01              BD1: 5.1 0.44  0.39  2.94  1095.   0.
  40.60  2.94  2.94     4544.      3609.      8154.    46.82    37.18    84.00
  10.276    8.162   18.438      16.569       0.124         7.822         2.133
  AZNM  TSUBS0841362020304 01              BD1: 5.1 0.40  0.20  0.25   720.   0.
  34.40  2.94  2.94     2988.      2373.      5361.    26.90    21.36    48.26
   5.379    4.272    9.651       4.886       0.006         4.494         1.226
  AZNM  TSUBS0841362020703 01              BD1: 5.1 0.40  0.52  2.94   355.   0.
  41.30  2.94  2.94     1473.      1170.      2643.    15.27    12.13    27.40
   3.055    2.426    5.481       7.070       0.040         2.552         0.696
  AZNM  TSXBS0841362020303 01              BD1: 5.1 0.46  0.07  0.15   275.   0.
```

```
  40.60  2.94  2.94     1141.       906.      2048.    11.87     9.43    21.30
   2.730    2.168    4.898       0.783       0.002         1.983         0.541
  AZNM  TSXBS0841362020703 01              BD1: 5.1 0.46  0.06  2.94   220.   0.
  42.80  2.94  2.94      913.       725.      1638.     9.59     7.61    17.20
   2.205    1.751    3.956       0.490       0.025         1.602         0.437
  AZNM  TSXBS0842362020703 01              BD1: 5.1 0.46  0.06  2.94   110.   0.
  42.70  2.94  2.94      457.       363.       819.     4.98     3.95     8.93
   1.144    0.909    2.053       0.254       0.013         0.831         0.227
  AZNM  TSXSS0841351020303 01              SD2: 6.7 0.57  0.31  1.81  1480.   0.
  42.70  2.94  2.94     6142.      4878.     11021.    59.34    47.13   106.47
  16.912   13.432   30.344      16.694       0.096        10.272         2.801
  AZNM  TSXSS0841352020203 01              SD2: 6.7 0.46  0.36  5.36   498.   0.
  40.60  2.94  2.94     2067.      1641.      3708.    21.47    17.05    38.53
   4.938    3.922    8.861       6.931       0.103         3.717         1.014
  AZNM  TSXSS0841352020303 01              SD2: 6.7 0.34  0.06  1.81   235.   0.
  40.60  2.94  2.94      975.       775.      1750.    10.15     8.06    18.21
   1.725    1.370    3.096       0.523       0.016         1.757         0.479
  AZNM  TSXSS0842351020203 01              SD2: 6.7 0.46  0.28  5.36   312.   0.
  42.70  2.94  2.94     1085.       861.      1946.    13.96    11.09    25.04
   3.210    2.550    5.760       3.524       0.067         2.416         0.659
  AZNM  TSXSS0842351020703 01              SD2: 6.7 0.46  0.31  4.69   220.   0.
  43.00  2.94  2.94      913.       725.      1638.    10.07     8.00    18.07
   2.316    1.839    4.156       2.808       0.042         1.743         0.475
  AZNM  TSXSS0842352020203 01              SD2: 6.7 0.46  0.36  5.36   804.   0.
  41.50  2.94  2.94     2795.      2220.      5015.    33.16    26.34    59.50
   7.627    6.057   13.684      10.745       0.159         5.740         1.566
  AZNM  TSXSS0842352020703 01              SD2: 6.7 0.46  0.31  4.69   340.   0.
  43.00  2.94  2.94     1411.      1121.      2532.    15.17    12.05    27.22
   3.489    2.771    6.260       4.229       0.064         2.626         0.716
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  AZNM  TSBBU0841361020310 01              BB1: 3.4 0.46  0.77  0.38   156.   0.
  32.00  1.54  1.54      647.       514.      1162.     6.62     5.25    11.87
   1.522    1.209    2.730       4.570       0.002         1.105         0.301
  AZNM  TSBBU0841362020210 01              BB1: 3.4 0.40  0.78  3.07   260.   0.
  22.40  1.54  1.54     1079.       857.      1936.    11.22     8.91    20.13
   2.244    1.782    4.027       7.862       0.031         1.875         0.511
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
  AZNM  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1255.   0.
 134.20  0.42  0.42     5779.      4493.     10272.    61.46    47.78   109.24
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1310.   0.
 134.20  0.42  0.42     5677.      4656.     10334.    59.61    48.89   108.50
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  NUKE 00    7000000 00              NUC      0.00  0.00  0.00  1259.   0.
 134.20  0.42  0.42     5303.      4623.      9926.    55.36    48.26   103.62
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Hydro                          8
  AZNM  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2490.   0.
  15.40  0.00  0.00     3484.      3538.      7022.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  AZNM  CC   0812   000000 00              GAS      0.16  0.00  0.00    19.   0.
  13.90  1.03  1.03       64.        49.       113.     0.50     0.39     0.89
   0.040    0.031    0.071       0.000       0.000         0.047         0.013
  AZNM  CC   0813   000000 00              GAS      0.16  0.00  0.00    16.   0.
  19.90  0.00  1.03        0.         3.         3.     0.00     0.03     0.03
   0.000    0.002    0.002       0.000       0.000         0.002         0.000
  AZNM  CC   0822   000000 00              GAS      0.02  0.00  0.00  8832.   0.
  13.90  1.03  1.03    38856.     29177.     68033.   292.70   219.79   512.49
   3.512    2.637    6.150       0.000       0.000        27.198         7.418
  AZNM  CC   0823   000000 00              GAS      0.15  0.00  0.00   510.   0.
  19.50  1.03  1.03      114.       263.       377.     1.12     2.58     3.70
```

```
   0.086    0.199    0.285       0.000       0.000         0.196         0.054
  AZNM  CC   0824   000000 00              GAS      0.16  0.00  0.00   351.   0.
  19.90  0.00  1.03        0.        35.        35.     0.00     0.45     0.45
   0.000    0.035    0.035       0.000       0.000         0.024         0.006
  AZNMTXCC   3523   000000 00              GAS      0.16  0.00  0.00   232.   0.
  19.90  0.00  1.03        0.        40.        40.     0.00     0.43     0.43
   0.000    0.034    0.034       0.000       0.000         0.023         0.006
  AZNM  CC   8     (b)                      GAS      0.02  0.00  0.00  4007.  69.
  11.70  1.95  1.95    18428.     13300.     31728.   130.03    93.84   223.87
   1.300    0.938    2.239       0.000       0.000        11.881         3.240
IGCC                           10
Turbine                        11
  AZNM  CT   0822   000000 00              GAS      0.08  0.00  0.00  1747.   0.
   3.10  0.00  1.03        0.       301.       301.     0.00     3.31     3.31
   0.000    0.136    0.136       0.000       0.000         0.176         0.048
Biomass                        12
  AZNM  BIOMS00  53 000000 00              B1-: 0.6 0.02  0.08  0.57    18.   0.
  44.80  5.36  5.36       78.        60.       138.     0.62     0.48     1.11
   0.006    0.005    0.011       0.044       0.000         0.000         0.000
  AZNM  BIOCC0     (a)                     B1-: 0.6 0.02  0.08  0.57    44. 200.
  44.80  5.34  5.34      195.       141.       336.     1.61     1.16     2.76
   0.016    0.012    0.028       0.111       0.001         0.000         0.000
Geothermal                     13
  AZNM  GEO  00     000000 00              GEOTH    0.00  0.00  3.70    29.   0.
  87.40  0.00  0.00      123.        98.       221.     3.99     3.15     7.14
   0.000    0.000    0.000       0.000       0.013         0.000         0.000
  AZNM  GEOA 0     (a)                     GEOTH    0.00  0.00  3.70   280. 352.
  85.80  0.00  0.00     1244.       898.      2142.    40.30    29.09    69.39
   0.000    0.000    0.000       0.000       0.128         0.000         0.000
Landfill Gas                   14
  AZNM  LFGAS00     000000 00              WASTE    0.25  0.00  0.00    11.   0.
  78.60 10.48 10.48       49.        38.        87.     0.67     0.51     1.18
   0.083    0.063    0.146       0.000       0.000         0.000         0.000
  AZNM  LG   0     (a)                     WASTE    0.25  0.00  0.00     6. 181.
  78.60 10.48 10.48       25.        18.        43.     0.25     0.18     0.43
   0.031    0.022    0.053       0.000       0.000         0.000         0.000
Wind                           15
  AZNM  WIND 00     000000 00              NONE     0.00  0.00 71.00    49.   0.
  26.40  0.00  0.00      102.        57.       159.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  WIN510     (a)                     NONE     0.00  0.00 71.00   263. 144.
  26.40  0.00  0.00      501.       257.       758.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                      16
Solar                          17
  AZNM  SOLAR00     000000 00              NONE     0.00  0.00 71.00    61.   0.
  47.00  0.00  0.00       17.        12.        29.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
  AZNM  SLRPV0     (a)                     NONE     0.00  0.00 71.00     3. 359.
  10.00  0.00  0.00        4.         3.         6.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other               18
Fossil_Other                   19
Pump Storage                   20
  AZNM  PUMPS00     000000 00              NONE     0.00  0.00 71.00   185.   0.
   6.50  0.00  0.00       38.        46.        84.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Int. Imports                   21
Cgn_Coal                       22
Cgn_Gas                        23
  AZNM  CGCT 0822   000000 00              GAS      0.11  0.00  0.00    57.   0.
   2.80  1.03  1.03       13.        30.        43.     0.13     0.29     0.42
   0.007    0.016    0.023       0.000       0.000         0.022         0.006
  AZNM  CGCC 0812   000000 00              GAS      0.15  0.00  0.00    73.   0.
  13.90  1.03  1.03      245.       113.       358.     2.07     0.95     3.02
```

```
   0.151    0.070    0.221       0.000       0.000         0.160         0.044
  AZNM  CGCC 0813   000000 00              GAS      0.15  0.00  0.00   102.   0.
  13.90  1.03  1.03      200.       158.       358.     1.86     1.47     3.33
   0.137    0.108    0.245       0.000       0.000         0.177         0.048
  AZNM  CGCC 0822   000000 00              GAS      0.04  0.00  0.00  1190.   0.
  13.90  1.03  1.03     4000.      3068.      7068.    30.36    23.29    53.65
   0.562    0.431    0.992       0.000       0.000         2.847         0.776
  AZNM  CGCC 0823   000000 00              GAS      0.15  0.00  0.00   113.   0.
  13.90  1.03  1.03       25.       175.       200.     0.24     1.65     1.89
   0.018    0.123    0.141       0.000       0.000         0.100         0.027
Cgn_Oil                        24
Cgn_Other                      25
NonCG IPP_Coal                 26
NonCG IPP_Gas                  27
NonCG IPP_Other                28
Blr_Coal                       29
Blr_Gas                        30
Blr_Oil                        31
Blr_Other                      32
SteamOnly Cogen                33
Rep.Coal-CC                    34
Rep.O/G-CC                     35
Rep.Coal-IGCC                  36
Ret.Scrubber                   37
Ret.ExistSCR & Scrub           38
Ret.ExistSNCR & Scrub          39
Ret.SCR                        40
Ret.ExistScrub & SCR           41
Ret.SNCR                       42
Ret.ExistScrub & SNCR          43
Ret.SCR+Scrb                   44
Ret.SNCR+Scrub                 45
Ret.Gas Reburn                 46
Ret.ExistScrub+GasR            47
Ret.GasReburn+Scrub            48
Ret.ACI                        49
Ret.ExistScrub&ACI             50
Ret.ExistSCR&ACI               51
Ret.ExistSNCR&ACI              52
Ret.ACI & SCR                  53
Ret.ExistScrub&ACI&SCR         54
Ret.ACI & SNCR                 55
Ret.ExistScrub&ACI&SNCR        56
Ret.ACI & Srub                 57
Ret.ExistSCR&ACI&Scrub         58
Ret.ExistSNCR&ACI&Scrub        59
Ret.ExistSNCR&ExistScrub&ACI   60
Ret.ExistSCR&ExistScrub&ACI    61
Ret.ExistNOx&ExistScrub&ACI    62
Ret.SCR & Scrub & ACI          63
Ret.SNCR & Scrub & ACI         64
Ret.O/G SCR                    65
Ret.O/G SNCR                   66
Ret.Nuclear (age 30+10 yrs)    67
Ret.Nuclear (age 40+20 yrs)    68
Ret. Biomass Cofiring          69
CT Early Retirement            70
CC Early Retirement            71
O/G Early Retirement           72
Coal Early Retirement          73
Nuke Early Retirement          74
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
```

rted in BBtu

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Year: 2020, Region: RMPA     (Emissions By Plant)
-------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                     (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                         (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                   Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
  RMPA  TCOLA0831402020105 01              BD1: 5.1 0.11  0.08  0.51    80.   0.
  23.60  3.91  3.91      332.       264.       596.     2.99     2.37     5.36
   0.164    0.131    0.295       0.201       0.001         0.499         0.136
Scrubbed Coal                  2
  RMPA  TRRBS0832342030304 01              BD1: 5.1 0.26  0.53  0.25   100.   0.
  23.10  2.94  2.94      415.       330.       745.     4.84     3.85     8.69
   0.630    0.500    1.130       2.288       0.001         0.809         0.221
  RMPA  TSABS0841341020303 01              BD1: 5.1 0.46  0.08  0.15   158.   0.
  43.00  2.94  2.94      656.       521.      1177.     6.64     5.28    11.92
   1.528    1.213    2.741       0.447       0.001         1.110         0.303
  RMPA  TSABS0841341020304 01              BD1: 5.1 0.80  0.15  0.25   107.   0.
  43.00  2.94  2.94      444.       353.       797.     4.48     3.56     8.03
   1.790    1.422    3.213       0.602       0.001         0.748         0.204
  RMPA  TSABS0841342020303 01              BD1: 5.1 0.40  0.08  0.15   352.   0.
  42.70  2.94  2.94     1461.      1160.      2621.    14.07    11.17    25.24
   2.814    2.235    5.048       0.947       0.002         2.351         0.641
  RMPA  TSABS0841342020304 01              BD1: 5.1 0.43  0.53  0.25   446.   0.
  42.80  2.94  2.94     1851.      1470.      3321.    19.47    15.47    34.94
   4.138    3.286    7.424       9.302       0.004         3.253         0.887
  RMPA  TSUBS0841332020304 01              BD1: 5.1 0.33  0.08  0.25   262.   0.
  40.60  2.94  2.94     1087.       864.      1951.    11.40     9.05    20.45
   1.880    1.493    3.374       0.767       0.003         1.904         0.519
  RMPA  TSUBS0842332020203 01              BD1: 5.1 0.33  0.15  2.94   856.   0.
  40.60  2.94  2.94     3553.      2821.      6374.    37.81    30.03    67.85
   6.334    5.030   11.364       4.987       0.100         6.318         1.723
  RMPA  TSUBS0842332020304 01              BD1: 5.1 0.45  0.15  0.25   519.   0.
  41.10  2.94  2.94     2154.      1711.      3865.    22.90    18.19    41.08
   5.106    4.056    9.162       3.081       0.005         3.826         1.043
  RMPA  TSXSS0832402020104 01              SB2: 6.5 0.18  0.09  4.21    80.   0.
  23.10  2.94  2.94      332.       264.       596.     3.82     3.03     6.85
   0.344    0.273    0.617       0.325       0.014         0.661         0.180
  RMPAWYTSZLS0841322020103 01              SD1: 4.4 0.32  0.03  3.70  1100.   0.
  40.60  2.94  2.94     1882.      3626.      5508.    19.62    37.80    57.42
   3.139    6.048    9.187       0.965       0.106         5.540         1.511
  RMPAWYTSZLS0841322020103 01              SE1: 5.5 0.32  0.05  4.65  1100.   0.
  40.60  2.94  2.94     2683.         0.      2683.    27.97     0.00    27.97
   4.475    0.000    4.475       0.705       0.065         2.699         0.736
  RMPA  TSASS0841342020303 01              SD2: 6.7 0.40  0.07  1.81   178.   0.
  43.00  2.94  2.94      739.       587.      1325.     7.42     5.90    13.32
   1.485    1.179    2.664       0.466       0.012         1.285         0.350
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  RMPA  TCOLU0811351020710 01              BB1: 3.4 0.91  1.00  3.41     7.   0.
  32.00  1.54  1.54       29.        23.        52.     0.30     0.24     0.54
```

```
   0.137    0.109    0.247       0.271       0.001         0.050         0.014
  RMPA  TCOLU0811402050110 01              BB2: 4.1 0.46  0.41  2.62    30.   0.
  32.00  1.54  1.54      125.        99.       223.     1.29     1.03     2.32
   0.301    0.239    0.540       0.474       0.003         0.216         0.059
  RMPA  TCOLU0811342050710 01              BB2: 4.1 0.46  0.64  4.10    19.   0.
  32.00  1.54  1.54       79.        63.       141.     0.82     0.65     1.47
   0.189    0.150    0.340       0.474       0.003         0.137         0.037
  RMPA  TCOLU0811352050710 01              BB1: 3.4 0.47  0.45  3.41     5.   0.
  32.00  1.54  1.54       21.        16.        37.     0.22     0.17     0.39
   0.051    0.040    0.091       0.087       0.001         0.036         0.010
  RMPA  TCOLU0831331020310 01              BB2: 4.1 0.80  1.00  0.45    45.   0.
  32.00  1.54  1.54      187.       148.       335.     1.94     1.54     3.48
   0.777    0.617    1.394       1.742       0.001         0.325         0.089
  RMPA  TOLSU0812321020110 01              SB1: 4.5 1.28  1.00  4.41    15.   0.
  26.40  1.54  1.54       62.        49.       112.     0.87     0.69     1.55
   0.553    0.439    0.992       0.776       0.003         0.150         0.041
  RMPA  TSABU0841341020310 01              BB2: 4.1 0.80  0.74  0.45   106.   0.
  32.00  1.54  1.54      440.       349.       789.     4.60     3.65     8.25
   1.839    1.460    3.299       3.039       0.002         0.768         0.209
  RMPA  TSABU0841342020310 01              BB2: 4.1 0.46  0.70  0.45   208.   0.
  22.40  1.54  1.54      863.       686.      1549.     8.68     6.89    15.57
   1.995    1.585    3.580       5.425       0.004         1.450         0.395
  RMPA  TSASU0832342020310 01              SB2: 6.5 0.46  1.00  1.75    49.   0.
  32.00  1.54  1.54      203.       162.       365.     2.21     1.76     3.97
   0.509    0.405    0.914       1.987       0.003         0.383         0.105
  RMPA  TSASU0841342020310 01              SB2: 6.5 0.44  0.65  1.75  1155.   0.
  24.70  1.54  1.54     4793.      3807.      8600.    49.38    39.22    88.59
  10.937    8.686   19.623      28.793       0.078         8.547         2.331
  RMPA  TSBBU0812341020710 01              BB2: 4.1 0.96  1.00  4.10    48.   0.
  32.00  1.54  1.54      199.       158.       357.     2.50     1.99     4.49
   1.204    0.956    2.160       2.246       0.009         0.418         0.114
  RMPA  TSCBU0832342020310 01              BB2: 4.1 0.46  0.61  0.45   126.   0.
  28.50  1.54  1.54      523.       415.       938.     6.01     4.77    10.78
   1.381    1.097    2.478       3.303       0.002         1.003         0.274
  RMPA  TSCBU0841342020310 01              BB2: 4.1 0.46  0.61  0.45   133.   0.
  26.40  1.54  1.54      552.       438.       990.     5.79     4.60    10.39
   1.331    1.057    2.389       3.194       0.002         0.967         0.264
  RMPA  TSLSU0712261020110 01              SB1: 4.5 1.27  0.67  4.41    22.   0.
  32.00  1.54  1.54       91.        73.       164.     1.10     0.88     1.98
   0.698    0.554    1.253       0.658       0.004         0.191         0.052
Oil/Gas Steam                    5
Oil/Gas Steam_Nox                6
Nuclear                          7
Hydro                            8
  RMPA  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  2692.   0.
  15.30  0.00  0.00     3767.      3826.      7592.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                   9
  RMPA  CC   0822   000000 00              GAS      0.03  0.00  0.00  1281.   0.
  13.90  1.03  1.03     5060.      3517.      8577.    38.42    26.71    65.13
   0.596    0.414    1.010       0.000       0.000         3.457         0.943
IGCC                            10
Turbine                         11
  RMPA  CT   0722   000000 00              GAS      0.08  0.00  0.00    48.   0.
   2.80  1.03  1.03       11.         8.        19.     0.12     0.09     0.21
   0.005    0.004    0.008       0.000       0.000         0.011         0.003
  RMPA  CT   0812   000000 00              GAS      0.08  0.00  0.00    10.   0.
   2.80  1.03  1.03        2.         2.         4.     0.03     0.02     0.04
   0.001    0.001    0.002       0.000       0.000         0.002         0.001
  RMPA  CT   0822   000000 00              GAS      0.08  0.00  0.00  1444.   0.
   3.00  1.03  1.03      245.       214.       459.     2.67     2.34     5.02
   0.111    0.097    0.208       0.000       0.000         0.266         0.073
Biomass                         12
  RMPA  BIOMS00  53 000000 00              B1-: 0.6 0.02  0.08  0.57     1.   0.
  44.80  5.36  5.36        4.         3.         8.     0.03     0.03     0.06
```

```
   0.000    0.000    0.001       0.002       0.000         0.000         0.000
Geothermal                    13
Landfill Gas                  14
  RMPA  LFGAS00     000000 00              WASTE    0.25  0.00  0.00     1.   0.
  78.60 10.48 10.48        4.         3.         8.     0.06     0.05     0.11
   0.008    0.006    0.013       0.000       0.000         0.000         0.000
Wind                          15
  RMPA  WIND 00     000000 00              NONE     0.00  0.00 71.00   270.   0.
  26.40  0.00  0.00      648.       363.      1011.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                     16
Solar                         17
  RMPA  SOLAR00     000000 00              NONE     0.00  0.00 71.00     3.   0.
  47.00  0.00  0.00        5.         3.         7.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other              18
Fossil_Other                  19
Pump Storage                  20
Int. Imports                  21
Cgn_Coal                      22
Cgn_Gas                       23
  RMPA  CGCT 0812   000000 00              GAS      0.12  0.00  0.00     3.   0.
   2.80  1.03  1.03       10.         2.        12.     0.10     0.02     0.12
   0.006    0.001    0.007       0.000       0.000         0.006         0.002
  RMPA  CGCT 0821   000000 00              GAS      0.12  0.00  0.00    36.   0.
   2.80  1.03  1.03      125.        93.       218.     1.05     0.79     1.84
   0.064    0.048    0.112       0.000       0.000         0.098         0.027
  RMPA  CGCT 0822   000000 00              GAS      0.08  0.00  0.00    71.   0.
   2.80  1.03  1.03       16.        12.        29.     0.18     0.13     0.31
   0.007    0.005    0.013       0.000       0.000         0.017         0.005
  RMPA  CGCC 0812   000000 00              GAS      0.13  0.00  0.00    55.   0.
  18.90  1.03  1.03      185.        28.       213.     1.63     0.25     1.88
   0.109    0.017    0.126       0.000       0.000         0.100         0.027
  RMPA  CGCC 0822   000000 00              GAS      0.11  0.00  0.00   144.   0.
  13.90  1.03  1.03      484.        74.       558.     4.13     0.63     4.77
   0.219    0.034    0.253       0.000       0.000         0.253         0.069
Cgn_Oil                       24
Cgn_Other                     25
  RMPA  CGBIO00  53 000000 00              B1-: 0.6 0.02  0.08  0.57     7.   0.
  44.80  5.36  5.36       30.        23.        54.     0.24     0.19     0.43
   0.002    0.002    0.004       0.017       0.000         0.000         0.000
NonCG IPP_Coal                26
NonCG IPP_Gas                 27
NonCG IPP_Other               28
Blr_Coal                      29
Blr_Gas                       30
Blr_Oil                       31
Blr_Other                     32
SteamOnly Cogen               33
Rep.Coal-CC                   34
Rep.O/G-CC                    35
Rep.Coal-IGCC                 36
Ret.Scrubber                  37
Ret.ExistSCR & Scrub          38
Ret.ExistSNCR & Scrub         39
Ret.SCR                       40
Ret.ExistScrub & SCR          41
Ret.SNCR                      42
Ret.ExistScrub & SNCR         43
Ret.SCR+Scrb                  44
Ret.SNCR+Scrub                45
Ret.Gas Reburn                46
Ret.ExistScrub+GasR           47
Ret.GasReburn+Scrub           48
Ret.ACI                       49
```

```
Ret.ExistScrub&ACI            50
Ret.ExistSCR&ACI              51
Ret.ExistSNCR&ACI             52
Ret.ACI & SCR                 53
Ret.ExistScrub&ACI&SCR        54
Ret.ACI & SNCR                55
Ret.ExistScrub&ACI&SNCR       56
Ret.ACI & Srub                57
Ret.ExistSCR&ACI&Scrub        58
Ret.ExistSNCR&ACI&Scrub       59
Ret.ExistSNCR&ExistScrub&ACI  60
Ret.ExistSCR&ExistScrub&ACI   61
Ret.ExistNOx&ExistScrub&ACI   62
Ret.SCR & Scrub & ACI         63
Ret.SNCR & Scrub & ACI        64
Ret.O/G SCR                   65
Ret.O/G SNCR                  66
Ret.Nuclear (age 30+10 yrs)   67
Ret.Nuclear (age 40+20 yrs)   68
Ret. Biomass Cofiring         69
CT Early Retirement           70
CC Early Retirement           71
O/G Early Retirement          72
Coal Early Retirement         73
Nuke Early Retirement         74
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation repo
rted in BBtu


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
Year: 2020, Region: NWPE     (Emissions By Plant)
--------------------------------------------------


            NOx                  SO2         MER           CO2          Carbon

                      Generation                      Trillion
         Emission             Emission    Emission      Emission       Emission
                                                      (lb/MBtu)(lb/TBtu)(MW)    $
/KWyr   VOM Mill/KWh    (GWh)                          (Btu)
        (1000 Tons)          (1000 Tons)   (Tons)       (Mil Tonnes)(Mil Tonnes)
     Unit                                    Fuel    NOx   SO2 MERCURY Cap.  Cap
.  FO&M WINT. SUMM.   WINTER     SUMMER      Total   WINTER   SUMMER    Total
  WINTER   SUMMER    Total       Total       Total         Total         Total
Scrubbed Coal_NOx              1
Scrubbed Coal                  2
  NWPE  TSABS0841352020104 01              BD1: 5.1 0.40  0.15  3.24  1580.   0.
  42.70  2.94  2.94     5725.      4361.     10086.    59.17    45.07   104.24
  11.834    9.014   20.848       7.818       0.169         9.707         2.647
  NWPE  TSXBS0841332020103 01              BD1: 5.1 0.40  0.12  1.72  1250.   0.
  41.30  2.94  2.94     5188.      4120.      9308.    51.36    40.79    92.15
  10.272    8.158   18.430       5.529       0.079         8.581         2.340
  NWPE  TSXBS0841402020103 01              BD1: 5.1 0.43  0.17  1.72  2410.   0.
  42.30  2.94  2.94    10002.      7944.     17946.    99.89    79.33   179.22
  21.576   17.136   38.712      15.323       0.154        16.690         4.552
  NWPE  TSXBS0841332020303 01              BD1: 5.1 0.46  0.03  0.15  2440.   0.
  40.60  2.94  2.94    10126.      8043.     18169.   100.04    79.45   179.49
  22.859   18.155   41.014       3.096       0.014        16.715         4.559
  NWPE  TSXBS0841362020304 01              BD1: 5.1 0.28  0.11  0.25   274.   0.
  40.60  2.94  2.94     1137.       903.      2040.    11.38     9.04    20.42
```

```
   1.594    1.266    2.859       1.149       0.003         1.902         0.519
  NWPE  TSXSS0741322020703 01              SE1: 5.5 0.40  0.08  3.87   700.   0.
  40.60  2.94  2.94     2905.      2307.      5212.    30.36    24.11    54.46
   6.071    4.822   10.893       2.059       0.105         5.255         1.433
  NWPE  TSXSS0742322020703 01              SD1: 4.4 0.40  0.13  3.08  1360.   0.
  41.60  2.94  2.94     5644.      4483.     10127.    62.13    49.35   111.48
  12.426    9.869   22.295       7.101       0.172        10.755         2.933
  NWPEWYTSZLS0841322020703 01              SD1: 4.4 0.40  0.17  3.08   330.   0.
  42.70  2.94  2.94     1370.      1088.      2457.    14.38    11.42    25.80
   2.876    2.284    5.160       2.167       0.040         2.489         0.679
  NWPEWYTSZLS0842322020104 01              SB1: 4.5 0.50  0.14  2.96   335.   0.
  40.60  2.94  2.94     1390.       811.      2201.    16.24     9.47    25.71
   4.060    2.369    6.428       1.774       0.038         2.481         0.677
  NWPEWYTSZLS0842322020104 01              SD1: 4.4 0.50  0.19  2.86   335.   0.
  40.60  2.94  2.94        0.       293.       293.     0.00     3.42     3.42
   0.000    0.856    0.856       0.331       0.005         0.330         0.090
Unscrubbed Coal_NOx            3
Unscrubbed Coal                4
  NWPE  TCOLU0811332050710 01              BB2: 4.1 0.44  0.53  4.10     8.   0.
  32.00  1.54  1.54       33.        26.        60.     0.35     0.27     0.62
   0.076    0.061    0.137       0.163       0.001         0.058         0.016
  NWPE  TCOLU0831332050710 01              BB2: 4.1 0.44  1.00  4.10    50.   0.
  11.70  1.54  1.54      208.       165.       372.     2.16     1.71     3.87
   0.478    0.380    0.858       1.936       0.008         0.361         0.098
  NWPE  TSABU0832332020110 01              BB2: 4.1 0.40  0.78  2.62    70.   0.
  32.00  1.54  1.54      291.       231.       521.     3.25     2.58     5.84
   0.651    0.517    1.168       2.274       0.008         0.544         0.148
  NWPE  TSABU0841332020110 01              BB2: 4.1 0.40  0.78  2.62   105.   0.
  32.00  1.54  1.54      436.       346.       782.     4.58     3.63     8.21
   0.915    0.727    1.642       3.194       0.011         0.764         0.208
  NWPE  TSABU0841352020310 01              BB1: 3.4 0.31  0.68  0.38   258.   0.
  22.40  1.54  1.54     1071.       850.      1921.    10.76     8.54    19.30
   1.667    1.324    2.992       6.534       0.004         1.797         0.490
  NWPE  TSASU0742322020110 01              SB1: 4.5 0.40  1.00  4.41   156.   0.
  26.40  1.54  1.54      647.       514.      1162.     7.13     5.66    12.79
   1.426    1.132    2.558       6.395       0.028         1.234         0.337
  NWPE  TSASU0841322020110 01              SB1: 4.5 0.46  1.00  4.41   106.   0.
  32.00  1.54  1.54      440.       349.       789.     4.66     3.70     8.37
   1.073    0.852    1.924       4.183       0.018         0.807         0.220
  NWPE  TSASU0842322020110 01              SB1: 4.5 0.61  1.00  4.41   336.   0.
  32.00  1.54  1.54     1394.      1108.      2502.    15.01    11.92    26.93
   4.585    3.642    8.227      13.464       0.059         2.598         0.709
  NWPE  TSBBU0841332020110 01              BB2: 4.1 0.40  1.00  2.62   425.   0.
  26.40  1.54  1.54     1764.      1401.      3165.    17.11    13.59    30.70
   3.422    2.718    6.139      15.349       0.040         2.859         0.780
  NWPE  TSXBU0841402020110 01              BB2: 4.1 0.40  0.30  2.62   370.   0.
  28.90  1.54  1.54     1536.      1220.      2755.    15.58    12.37    27.95
   3.115    2.474    5.589       4.192       0.037         2.602         0.710
Oil/Gas Steam                  5
Oil/Gas Steam_Nox              6
Nuclear                        7
Hydro                          8
  NWPE  HYDRO00     000000 00              HYDRO    0.00  0.00  0.00  1758.   0.
  15.20  0.00  0.00     2460.      2498.      4958.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Comb.Cycle Gas                 9
  NWPE  CC   0722   000000 00              GAS      0.02  0.00  0.00   240.   0.
  13.90  1.03  1.03      885.       825.      1710.     6.64     6.19    12.82
   0.066    0.062    0.128       0.000       0.000         0.681         0.186
IGCC                          10
  NWPE  IGCC 0831402050710 00              BD1: 5.1 0.06  0.00  0.25   100.   0.
  31.40  1.00  1.00      433.       335.       768.     3.15     2.44     5.59
   0.095    0.073    0.168       0.000       0.001         0.520         0.142
Turbine                       11
  NWPE  CT   0722   000000 00              GAS      0.08  0.00  0.00   160.   0.
```

```
   2.80  0.00  1.03        0.        65.        65.     0.00     0.71     0.71
   0.000    0.029    0.029       0.000       0.000         0.038         0.010
  NWPE  CT   0811   000000 00              GAS      0.13  0.00  0.00    14.   0.
   7.80  1.03  1.03       49.        11.        60.     0.44     0.10     0.54
   0.028    0.007    0.035       0.000       0.000         0.029         0.008
  NWPE  CT   0812   000000 00              GAS      0.10  0.00  0.00    53.   0.
   7.80  0.00  1.03        0.        27.        27.     0.00     0.29     0.29
   0.000    0.014    0.014       0.000       0.000         0.015         0.004
  NWPE  CT   0822   000000 00              GAS      0.08  0.00  0.00   928.   0.
   2.80  0.00  1.03        0.       147.       147.     0.00     1.62     1.62
   0.000    0.067    0.067       0.000       0.000         0.086         0.024
Biomass                         12
  NWPE  BIOMS00  52 000000 00              B1-: 0.6 0.02  0.08  0.57     5.   0.
  44.80  5.36  5.36       22.        17.        38.     0.17     0.13     0.31
   0.002    0.001    0.003       0.012       0.000         0.000         0.000
Geothermal                      13
  NWPE  GEO  00     000000 00              GEOTH    0.00  0.00  3.65   241.   0.
  87.40  0.00  0.00     1026.       811.      1837.    32.60    25.77    58.37
   0.000    0.000    0.000       0.000       0.106         0.000         0.000
Landfill Gas                    14
Wind                            15
  NWPE  WIND 00     000000 00              NONE     0.00  0.00 71.00   138.   0.
  26.40  0.00  0.00       62.        35.        97.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Fuel Cell                       16
Solar                           17
  NWPE  SOLAR00     000000 00              NONE     0.00  0.00 71.00    24.   0.
  47.00  0.00  0.00       38.        20.        59.     0.00     0.00     0.00
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
Non Fossil_Other                18
Fossil_Other                    19
  NWPE  WASTE072    000000 00              WASTE    0.70  0.01 10.30    41.   0.
 108.60  0.00  0.00      183.       140.       323.     2.02     1.54     3.56
   0.706    0.538    1.244       0.012       0.018         0.000         0.000
Pump Storage                    20
Int. Imports                    21
Cgn_Coal                        22
  NWPE  CGCOU0731322050710 01              SB1: 4.5 0.36  1.00  4.55    55.   0.
  11.70  1.54  1.54      223.       180.       402.     1.81     1.46     3.28
   0.325    0.263    0.588       1.638       0.007         0.316         0.086
Cgn_Gas                         23
  NWPE  CGCC 0811   000000 00              GAS      0.15  0.00  0.00    10.   0.
  13.90  1.03  1.03       45.        34.        79.     0.29     0.22     0.51
   0.021    0.016    0.037       0.000       0.000         0.027         0.007
Cgn_Oil                         24
Cgn_Other                       25
  NWPE  CGOTH00     000000 00              NONE     0.00  0.00  0.00    10.   0.
 103.60  0.00  0.00       43.        33.        77.     0.18     0.14     0.32
   0.000    0.000    0.000       0.000       0.000         0.000         0.000
NonCG IPP_Coal                  26
NonCG IPP_Gas                   27
NonCG IPP_Other                 28
Blr_Coal                        29
Blr_Gas                         30
Blr_Oil                         31
Blr_Other                       32
SteamOnly Cogen                 33
Rep.Coal-CC                     34
Rep.O/G-CC                      35
Rep.Coal-IGCC                   36
Ret.Scrubber                    37
Ret.ExistSCR & Scrub            38
Ret.ExistSNCR & Scrub           39
Ret.SCR                         40
Ret.ExistScrub & SCR            41
```

Ret.SNCR	42
Ret.ExistScrub & SNCR	43
Ret.SCR+Scrb	44
Ret.SNCR+Scrub	45
Ret.Gas Reburn	46
Ret.ExistScrub+GasR	47
Ret.GasReburn+Scrub	48
Ret.ACI	49
Ret.ExistScrub&ACI	50
Ret.ExistSCR&ACI	51
Ret.ExistSNCR&ACI	52
Ret.ACI & SCR	53
Ret.ExistScrub&ACI&SCR	54
Ret.ACI & SNCR	55
Ret.ExistScrub&ACI&SNCR	56
Ret.ACI & Srub	57
Ret.ExistSCR&ACI&Scrub	58
Ret.ExistSNCR&ACI&Scrub	59
Ret.ExistSNCR&ExistScrub&ACI	60
Ret.ExistSCR&ExistScrub&ACI	61
Ret.ExistNOx&ExistScrub&ACI	62
Ret.SCR & Scrub & ACI	63
Ret.SNCR & Scrub & ACI	64
Ret.O/G SCR	65
Ret.O/G SNCR	66
Ret.Nuclear (age 30+10 yrs)	67
Ret.Nuclear (age 40+20 yrs)	68
Ret. Biomass Cofiring	69
CT Early Retirement	70
CC Early Retirement	71
O/G Early Retirement	72
Coal Early Retirement	73
Nuke Early Retirement	74

(**) Industrial Boiler Steam Capacity reported in BBtu/hr, Steam Generation reported in BBtu

---

Year: 2020, Region: MECS (Emissions By Plant Type)

	Generation (GWh)			Trillion (Btu)			NOx Emission (1000 Tons)		
	WINTER Total	SUMMER Total	Total	WINTER Total	SUMMER Total	Total	WINTER Total	SUMMER Total	Total
Total Scrubbed Coal_NOx 1	83.	66.	149.	0.86	0.69	1.55	0.168	0.134	0.302
Total Scrubbed Coal 2	477.	379.	856.	5.40	4.29	9.69	0.846	0.672	1.518
Total Unscrubbed Coal_NOx 3	12533.	9954.	22488.	115.39	91.65	207.04	2.171	1.725	3.896

	SO2 Emission (1000 Tons)	MER Emission (Tons)	CO2 Emission (Mil Tonnes)	Carbon Emission (Mil Tonnes)
Total Scrubbed Coal_NOx 1	103.521	0.456	19.970	5.446

```
Total Unscrubbed Coal                 4
   17959.     14255.     32214.   178.68   141.82   320.50    30.503   24.205
54.708     144.872       0.507        30.156         8.224
Total Oil/Gas Steam                   5
    1053.       570.      1623.    10.10     5.46    15.56     1.005    0.544
 1.548       0.000       0.000         0.826         0.225
Total Oil/Gas Steam_Nox               6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                         7
    4676.      4072.      8748.    60.17    52.40   112.57     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                           8
     618.       395.      1013.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                  9
   12549.      7690.     20240.    90.81    55.33   146.15     0.930    0.570
 1.500       0.000       0.000         7.756         2.115
Total IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                        11
     597.       500.      1097.     5.19     4.51     9.70     0.260    0.217
 0.477       0.000       0.000         0.515         0.140
Total Biomass                        12
     698.       539.      1237.     6.44     4.97    11.41     0.064    0.050
 0.114       0.456       0.003         0.000         0.000
Total Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                   14
      22.        17.        39.     0.31     0.23     0.54     0.038    0.029
 0.066       0.000       0.000         0.000         0.000
Total Wind                           15
       2.         1.         2.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                      16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
     145.       115.       260.     1.60     1.26     2.86     0.000    0.000
 0.000       0.000       0.046         0.000         0.000
Total Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
    1066.       839.      1905.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
       1.         1.         2.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
     223.       180.       402.     2.31     1.87     4.18     0.468    0.377
 0.845       2.091       0.007         0.389         0.106
Total Cgn_Gas                        23
    5462.      3556.      9018.    40.99    27.06    68.05     2.979    1.891
 4.870       0.000       0.000         3.612         0.985
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
     316.       244.       561.     1.68     1.30     2.98     0.007    0.005
```

0.012 0.050 0.062 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
7695. 6112. 13807. 75.88 60.27 136.15 11.876 9.432
21.308 4.085 0.117 12.679 3.458
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
5806. 4611. 10417. 54.26 43.10 97.36 1.448 1.150
2.598 48.679 0.128 9.066 2.473
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                        49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI               51
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuke Early Retirement 74
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total MECS
71984. 54096. 126080. 650.08 496.21 1146.29 52.763 41.000
93.763 304.467 1.339 86.014 23.458

(**) Industrial Boiler Generation in BBtu, not included in the total regional generation

---

NOx
SO2 MER CO2 Carbon
Year: 2020, Region: ECAO (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
40273. 31882. 72155. 396.73 313.83 710.56 13.488 10.463
23.951 91.656 0.408 66.169 18.046
Total Scrubbed Coal 2
2021. 1480. 3501. 21.04 15.34 36.38 5.512 3.919
9.430 7.956 0.071 3.388 0.924
Total Unscrubbed Coal_NOx 3
2752. 1889. 4640. 25.54 17.54 43.08 3.843 2.623
6.467 23.694 0.071 4.012 1.094
Total Unscrubbed Coal 4
22144. 16258. 38402. 227.94 167.57 395.51 44.138 32.292
76.430 214.753 0.752 37.069 10.110
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
22213. 14649. 36862. 232.96 153.43 386.39 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Hydro 8
1806. 1169. 2974. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
19517. 9903. 29420. 146.66 74.49 221.15 1.615 0.859
2.474 0.000 0.000 11.736 3.201
Total IGCC 10
1135. 877. 2013. 8.26 6.38 14.64 0.413 0.319
0.732 0.000 0.003 1.364 0.372
Total Turbine 11
5693. 4262. 9955. 55.19 41.51 96.69 2.487 1.863
4.351 0.000 0.000 5.132 1.400
Total Biomass 12
364. 281. 645. 3.36 2.59 5.95 0.034 0.026
0.060 0.238 0.002 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
54. 41. 95. 0.73 0.56 1.29 0.090 0.069
0.159 0.000 0.000 0.000 0.000
Total Wind 15
164. 92. 256. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
397. 313. 710. 4.36 3.44 7.81 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
268. 205. 473. 2.95 2.25 5.20 0.614 0.468
1.082 0.000 0.000 0.000 0.000
Total Pump Storage 20
152. 110. 262. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
577. 466. 1043. 5.19 4.18 9.37 1.182 0.954
2.135 3.905 0.016 0.873 0.238
Total Cgn_Gas 23
1779. 865. 2643. 13.57 6.65 20.22 0.160 0.084
0.244 0.000 0.000 1.073 0.293
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
26. 20. 46. 0.22 0.17 0.39 0.002 0.002
0.004 0.016 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
    2194.      1743.      3937.    21.60    17.16    38.76     4.332    3.440
 7.772       2.326       0.006         3.610         0.984
Total Ret.ExistSCR & Scrub           38
   51462.     40873.     92335.   493.47   391.93   885.40    13.433   10.669
24.102      82.352       0.439        82.451        22.487
Total Ret.ExistSNCR & Scrub          39
   12120.      9626.     21746.   116.77    92.74   209.51    16.753   13.305
30.058      20.641       0.308        19.510         5.321
Total Ret.SCR                        40
    8969.      7067.     16035.    83.70    65.85   149.55     2.522    1.988
 4.510      75.666       0.261        13.927         3.798
Total Ret.ExistScrub & SCR           41
   52736.     41884.     94621.   523.44   415.72   939.16    13.749   10.920
24.669     198.824       0.422        87.457        23.852
Total Ret.SNCR                       42
    2154.      1524.      3678.    22.56    15.95    38.51     4.898    3.505
 8.403      20.132       0.059         3.586         0.978
Total Ret.ExistScrub & SNCR          43
     722.       574.      1296.     8.00     6.36    14.36     1.362    1.082
 2.444       2.349       0.012         1.337         0.365
Total Ret.SCR+Scrb                   44
   91849.     72949.    164798.   898.79   713.84  1612.63    24.745   19.653
44.399     123.265       0.821       150.172        40.956
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total ECAO
  343542.    260999.    604541.  3313.03  2529.49  5842.52   155.373  118.503  2
73.876     867.773       3.652       492.865       134.418
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: ERCT     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
   13971.     15806.     29776.   147.57   169.61   317.19    23.428   26.573
50.002      91.460       0.784        30.884         8.423
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    6142.      4878.     11021.    59.32    47.11   106.43     9.190    7.299
16.488      37.791       0.262        10.118         2.759
Total Oil/Gas Steam                 5
       0.     13709.     13709.     0.00   136.95   136.95     0.000   19.025
19.025       0.000       0.000         7.268         1.982
Total Oil/Gas Steam_Nox             6
       0.      1641.      1641.     0.00    16.26    16.26     0.000    0.973
 0.973       0.000       0.000         0.863         0.235
Total Nuclear                       7
   22733.     17771.     40504.   237.70   185.63   423.33     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
     431.       365.       796.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                9
   88769.     75392.    164161.   651.38   555.88  1207.26     6.566    5.765
12.332       0.000       0.000        64.070        17.474
Total IGCC                         10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                      11
```

```
    5270.     19727.     24996.    45.73   171.58   217.31     2.273    8.541
10.815       0.000       0.000       11.533          3.145
Total Biomass                        12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Landfill Gas                   14
     696.       514.      1210.     8.05     5.98    14.03     0.990    0.735
 1.725       0.000       0.000        0.000          0.000
Total Wind                           15
    1852.      1022.      2874.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Fuel Cell                      16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Non Fossil_Other               18
      44.        35.        79.     0.48     0.38     0.87     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Fossil_Other                   19
       9.         7.        16.     0.10     0.08     0.17     0.020    0.016
 0.036       0.000       0.000        0.000          0.000
Total Pump Storage                   20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Int. Imports                   21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Cgn_Coal                       22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Cgn_Gas                        23
    7103.     11392.     18495.    53.03    86.73   139.75     1.200    2.109
 3.309       0.000       0.000        7.417          2.023
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Cgn_Other                      25
     113.       252.       365.     0.68     1.50     2.18     0.134    0.307
 0.441       0.000       0.022        0.000          0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000          0.000
```

```
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
    6392.      6311.     12703.    67.56    66.89   134.45    10.231   10.107
20.338      17.910       0.497        13.033         3.554
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.      3940.      3940.     0.00    39.86    39.86     0.000    1.003
 1.003      19.928       0.035         3.845         1.049
Total Ret.ExistScrub & SCR           41
    9766.      8531.     18297.   100.06    87.49   187.55     2.501    2.187
 4.689      28.779       0.386        18.243         4.975
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
    4123.      3474.      7597.    43.50    36.77    80.27     1.088    0.919
 2.007       4.569       0.090         7.561         2.062
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.      1033.      1033.     0.00    10.08    10.08     0.000    0.737
 0.737       0.000       0.000         0.535         0.146
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring          69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement            70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement            71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement           72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement          73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement          74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total ERCT
  167414.    185798.    353212.  1415.16  1618.77  3033.93    57.622   86.298  1
43.921     200.438       2.076       175.370        47.828
```


(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2020, Region: MACE (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
1241. 986. 2226. 12.55 9.97 22.53 2.052 1.630
3.682 2.630 0.047 2.098 0.572
Total Scrubbed Coal 2
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal_NOx 3
4685. 3045. 7730. 47.15 30.50 77.65 5.311 3.447
8.758 42.706 0.148 7.231 1.972
Total Unscrubbed Coal 4
992. 674. 1666. 10.13 6.91 17.04 1.959 1.326
3.285 9.374 0.023 1.587 0.433
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
39910. 29505. 69414. 424.23 313.84 738.06 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
2346. 1770. 4115. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
9298. 9332. 18630. 72.25 73.28 145.53 1.432 1.536
2.969 0.000 0.000 7.724 2.106
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
17. 1872. 1889. 0.18 21.63 21.80 0.008 1.034
1.042 0.000 0.000 1.157 0.316
Total Biomass 12
287. 209. 496. 2.35 1.71 4.07 0.024 0.017
0.041 0.163 0.001 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
650. 473. 1123. 6.77 4.94 11.72 0.833 0.608
1.441 0.000 0.000 0.000 0.000

Total Wind 15
238. 123. 361. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
31. 23. 54. 0.23 0.17 0.40 0.046 0.034
0.080 0.000 0.000 0.021 0.006
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
1133. 893. 2026. 12.46 9.83 22.29 0.000 0.000
0.000 0.000 0.791 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
264. 199. 463. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
32. 26. 59. 0.29 0.23 0.52 0.058 0.047
0.104 0.286 0.001 0.048 0.013
Total Cgn_Gas 23
7060. 5552. 12612. 53.71 42.76 96.47 2.227 1.778
4.005 0.000 0.000 5.120 1.396
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                    37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub            38
     813.        645.       1458.     8.63     6.85    15.48     0.211    0.168
 0.379       0.681       0.014         1.442         0.393
Total Ret.ExistSNCR & Scrub           39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                         40
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR            41
    2411.       1915.       4326.    24.06    19.11    43.18     0.602    0.478
 1.079       3.277       0.040         4.021         1.097
Total Ret.SNCR                        42
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR           43
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                    44
     741.        598.       1339.     6.32     5.10    11.43     0.158    0.128
 0.286       0.503       0.011         1.064         0.290
Total Ret.SNCR+Scrub                  45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                  46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR             47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub             48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                         49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI              50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI                51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI               52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                   53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR          54
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                  55
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR         56
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                  57
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub          58
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
    5155.      4094.      9248.    48.30    38.36    86.67     1.579    1.254
 2.834       9.533       0.080         8.071         2.201
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MACE
   77303.     61934.    139237.   729.63   585.20  1314.83    16.500   13.486
29.986      69.153       1.156        39.583        10.795
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
```

```
                                                                                                                                  NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: MACW     (Emissions By Plant Type)
             Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
    4856.      3856.      8712.    45.81    36.39    82.20     0.701    0.556
 1.257       6.960       0.058         7.655         2.088
Total Scrubbed Coal                  2
     133.       105.       238.     1.38     1.10     2.48     0.277    0.220
 0.497       0.446       0.006         0.231         0.063
Total Unscrubbed Coal_NOx            3
     363.       288.       651.     3.62     2.87     6.49     0.676    0.537
 1.213       3.568       0.011         0.604         0.165
Total Unscrubbed Coal                4
     932.       687.      1619.     9.69     7.15    16.84     1.893    1.394
 3.287      10.529       0.062         1.568         0.428
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   14843.      9613.     24456.   157.92   102.46   260.39     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    1512.       632.      2144.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    8758.      4159.     12917.    65.69    31.19    96.88     0.657    0.312
 0.969       0.000       0.000         5.141         1.402
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       0.       135.       135.     0.00     1.50     1.50     0.000    0.064
 0.064       0.000       0.000         0.080         0.022
Total Biomass                       12
      74.        57.       131.     0.68     0.53     1.20     0.007    0.005
 0.012       0.048       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       4.         3.         8.     0.06     0.05     0.11     0.008    0.006
 0.013       0.000       0.000         0.000         0.000
Total Wind                          15
      17.        10.        27.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
     525.       414.       938.     5.77     4.55    10.32     0.000    0.000
```

```
 0.000       0.000       0.336         0.000         0.000
Total Fossil_Other                    19
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                    20
      81.        175.        256.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
    1583.       1201.       2785.    13.93    10.41    24.34     2.595    1.928
 4.523      11.928       0.051         2.267         0.618
Total Cgn_Gas                         23
      72.        189.        261.     0.67     1.81     2.49     0.060    0.149
 0.209       0.000       0.000         0.132         0.036
Total Cgn_Oil                         24
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
     156.        121.        277.     0.83     0.64     1.48     0.004    0.003
 0.007       0.027       0.007         0.000         0.000
Total NonCG IPP_Coal                  26
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                   27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                 28
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                        29
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                         30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                         31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                       32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                 33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                     34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                      35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                   36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                    37
    1304.       1036.       2340.    12.43     9.87    22.30     2.343    1.861
 4.203       0.981       0.006         2.077         0.566
Total Ret.ExistSCR & Scrub            38
   11129.       8839.      19967.   104.72    83.17   187.90     2.560    2.033
 4.593      17.798       0.170        17.498         4.772
Total Ret.ExistSNCR & Scrub           39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                         40
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR          41
    7574.      6016.     13590.    70.28    55.81   126.09     1.757    1.395
 3.152       5.655       0.116        11.742         3.202
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
   15220.     12088.     27308.   148.52   117.96   266.48     3.713    2.949
 6.662      18.802       0.260        24.815         6.768
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
     575.       464.      1039.     5.92     4.78    10.69     1.187    0.958
 2.144       1.947       0.009         0.996         0.272
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MACW
   69710.     50089.    119799.   647.92   472.25  1120.17    18.436   14.370
32.806      78.691       1.091        74.804        20.401
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: MACS     (Emissions By Plant Type)
             Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
               (GWh)                            (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

```
Total Scrubbed Coal_NOx                1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                    2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx              3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                  4
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam                    5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox                6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                          7
    8324.      5461.     13785.    90.46    59.34   149.80     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                            8
      43.        16.        59.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                   9
    3603.      2653.      6256.    25.76    19.04    44.79     0.316    0.246
 0.563       0.000       0.000         2.377         0.648
Total IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                         11
    1649.      1604.      3253.    14.23    15.06    29.29     0.708    0.774
 1.482       0.000       0.000         1.554         0.424
Total Biomass                         12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                      13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                    14
      18.        14.        32.     0.24     0.19     0.43     0.030    0.023
 0.053       0.000       0.000         0.000         0.000
Total Wind                            15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                           17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
     242.       191.       434.     2.67     2.10     4.77     0.000    0.000
 0.000       0.000       0.169         0.000         0.000
Total Fossil_Other                    19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                    20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                        23
      62.       143.       205.     0.61     1.40     2.01     0.024    0.056
 0.081       0.000       0.000         0.107         0.029
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
     234.       181.       415.     0.98     0.76     1.74     0.000    0.000
 0.000       0.000       0.062         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
    1544.      1226.      2770.    16.09    12.78    28.87     4.070    3.233
 7.303       0.866       0.005         2.688         0.733
Total Ret.ExistSCR & Scrub           38
    6562.      5212.     11773.    65.99    52.41   118.40     1.512    1.201
 2.712       8.467       0.068        11.026         3.007
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.SCR+Scrb                    44
   10271.      8158.     18429.     96.77    76.86   173.62      2.908     2.310
 5.218       7.981       0.152        16.168          4.410
Total Ret.SNCR+Scrub                  45
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Gas Reburn                  46
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR             47
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub             48
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                         49
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI              50
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI                51
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI               52
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                   53
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR          54
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                  55
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR         56
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                  57
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub          58
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub         59
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI    60
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI     61
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI     62
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI           63
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI          64
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                     65
       0.          0.          0.     0.00     0.00     0.00      0.000     0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                    66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MACS
   32552.      24858.      57410.   313.79   239.93   553.72     9.569    7.843
17.412      17.314       0.456        33.920         9.251
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: WUMS     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
     552.        438.        990.     6.07     4.82    10.89     0.940    0.747
 1.687       4.286       0.008         1.015         0.277
Total Unscrubbed Coal_NOx           3
     285.        226.        511.     3.06     2.43     5.49     0.685    0.544
 1.230       1.878       0.012         0.530         0.144
Total Unscrubbed Coal               4
```

16701. 12637. 29339. 173.05 130.80 303.85 28.693 21.636
50.329 125.321 0.663 28.999 7.909
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
6313. 4817. 11130. 66.97 51.32 118.29 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
1007. 676. 1683. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
4810. 3033. 7843. 34.83 22.08 56.92 0.611 0.423
1.034 0.000 0.000 3.021 0.824
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
2315. 1164. 3478. 19.96 10.41 30.37 0.990 0.499
1.490 0.000 0.000 1.612 0.440
Total Biomass 12
52. 40. 92. 0.42 0.32 0.74 0.004 0.003
0.007 0.030 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
194. 143. 337. 2.17 1.60 3.77 0.267 0.197
0.464 0.000 0.000 0.000 0.000
Total Wind 15
20. 11. 32. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
61. 49. 110. 0.51 0.41 0.92 0.094 0.076
0.171 0.459 0.003 0.089 0.024
Total Cgn_Gas 23
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
    2986.      2372.      5358.    30.58    24.29    54.87     0.765    0.607
 1.372      23.062       0.172         5.294         1.444
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
     747.       593.      1340.     8.74     6.94    15.68     1.332    1.058
 2.391       7.838       0.004         1.460         0.398
Total Ret.ExistScrub & SNCR          43
     278.       169.       448.     2.89     1.76     4.66     0.752    0.458
 1.210       1.327       0.008         0.434         0.118
Total Ret.SCR+Scrb                   44
    5579.      4431.     10011.    57.20    45.43   102.63     1.430    1.136
 2.566       4.329       0.181         9.901         2.700
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total WUMS
   41901.     30800.     72701.   406.45   302.62   709.06    36.564   27.385
63.949     168.528       1.050        52.353        14.278
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: MANO     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                           (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
     249.       198.       447.     2.49     1.97     4.46     0.257    0.204
 0.460       0.557       0.001         0.415         0.113
Total Scrubbed Coal                 2
     813.       646.      1459.     9.14     7.26    16.41     2.491    1.978
 4.470       6.680       0.035         1.528         0.417
Total Unscrubbed Coal_NOx           3
    1212.       806.      2018.    11.83     7.87    19.71     1.745    1.161
 2.907       6.700       0.062         1.901         0.519
Total Unscrubbed Coal               4
   36396.     25999.     62395.   365.73   260.99   626.73    49.831   35.771
85.602     268.050       1.300        59.676        16.275
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
   59461.     44454.    103915.   627.24   468.56  1095.80     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Hydro 8
1079. 747. 1826. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
6730. 5173. 11903. 50.48 38.83 89.31 0.505 0.393
0.898 0.000 0.000 4.740 1.293
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
2299. 3535. 5835. 19.67 34.66 54.33 0.984 1.556
2.540 0.000 0.000 2.883 0.786
Total Biomass 12
4. 3. 8. 0.03 0.03 0.06 0.000 0.000
0.001 0.002 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
170. 130. 300. 2.32 1.77 4.09 0.285 0.218
0.503 0.000 0.000 0.000 0.000
Total Wind 15
88. 49. 137. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
93. 73. 166. 1.02 0.80 1.82 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
9. 7. 16. 0.10 0.08 0.17 0.020 0.016
0.036 0.000 0.000 0.000 0.000
Total Pump Storage 20
197. 142. 339. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Gas 23
97. 77. 175. 0.74 0.59 1.33 0.008 0.008
0.016 0.000 0.000 0.071 0.019
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
    3145.       2498.       5642.    31.81    25.27    57.08     4.484    3.561
 8.045       4.514       0.070         5.315         1.450
Total Ret.ExistSCR & Scrub           38
    2251.       1788.       4039.    23.53    18.69    42.22     0.859    0.682
 1.541       5.277       0.017         3.931         1.072
Total Ret.ExistSNCR & Scrub          39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
    1258.        999.       2256.    11.72     9.31    21.03     0.293    0.233
 0.526       7.983       0.046         2.029         0.553
Total Ret.ExistScrub & SCR           41
    3013.       2393.       5406.    30.95    24.58    55.53     0.902    0.717
 1.619       9.837       0.018         5.171         1.410
Total Ret.SNCR                       42
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
   30327.      24086.      54413.   312.81   248.44   561.25     9.770    7.759
17.529      56.194       0.210        52.265        14.254
Total Ret.SNCR+Scrub                 45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret. Biomass Cofiring          69
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CT Early Retirement            70
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CC Early Retirement            71
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total O/G Early Retirement           72
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuke Early Retirement 74
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total MANO
148890. 113803. 262694. 1501.62 1149.71 2651.33 72.435 54.257 1
26.692 365.795 1.759 139.926 38.162

(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2020, Region: MAPP (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Scrubbed Coal 2
24208. 18562. 42770. 262.35 201.20 463.55 51.607 39.014
90.621 82.279 1.210 44.849 12.232
Total Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal 4
33125. 24527. 57652. 351.46 260.21 611.66 71.884 53.754 1
25.639 266.597 1.362 58.397 15.926
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
15053. 11826. 26879. 161.21 126.44 287.65 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
5412. 4577. 9989. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
3667. 2363. 6030. 28.06 18.31 46.36 0.465 0.322
0.788 0.000 0.000 2.461 0.671
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
504. 1958. 2462. 5.17 22.39 27.56 0.233 1.072

1.305 0.000 0.000 1.463 0.399
Total Biomass 12
706. 546. 1252. 5.72 4.42 10.14 0.057 0.044
0.101 0.405 0.003 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
49. 38. 87. 0.67 0.51 1.18 0.083 0.063
0.146 0.000 0.000 0.000 0.000
Total Wind 15
1498. 837. 2336. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
150. 118. 268. 1.65 1.30 2.95 0.000 0.000
0.000 0.000 0.105 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
1. 1. 2. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
312. 252. 563. 2.79 2.25 5.03 0.706 0.570
1.276 1.283 0.009 0.469 0.128
Total Cgn_Gas 23
7. 16. 23. 0.08 0.17 0.25 0.003 0.007
0.011 0.000 0.000 0.013 0.004
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
9. 7. 15. 0.04 0.03 0.06 0.000 0.000
0.000 0.000 0.002 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                  37
    6176.      4905.     11081.    70.44    55.95   126.39    25.997   20.647
46.643       7.331       0.356        12.349         3.368
Total Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                       40
   12716.      9749.     22465.   130.33    99.87   230.20     3.566    2.732
 6.297      99.885       0.529        21.973         5.993
Total Ret.ExistScrub & SCR          41
    3615.      2871.      6486.    35.96    28.56    64.51     0.899    0.714
 1.613       4.710       0.110         6.224         1.698
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring          69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement            70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement            71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement           72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement          73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement          74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total MAPP
  107209.     83151.    190359.  1055.92   821.59  1877.51   155.500  118.940  2
74.440     462.490       3.687       148.197        40.417
--------------------------------------------------------------------------------
```


(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2020, Region: UPNY (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
3453. 2742. 6195. 31.97 25.39 57.35 0.671 0.533
1.204 6.333 0.053 5.341 1.457
Total Scrubbed Coal 2
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal_NOx 3
1502. 1076. 2579. 14.92 10.66 25.58 1.768 1.254
3.022 14.068 0.042 2.382 0.650
Total Unscrubbed Coal 4
3843. 2151. 5994. 39.73 22.21 61.94 8.023 4.321
12.343 39.025 0.188 5.768 1.573
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
12447. 11189. 23636. 130.54 117.38 247.92 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
15534. 10355. 25889. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Biomass 12
78. 60. 138. 0.72 0.56 1.28 0.007 0.006
0.013 0.051 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
27. 20. 47. 0.37 0.28 0.65 0.045 0.034
0.079 0.000 0.000 0.000 0.000
Total Wind 15

87. 49. 136. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
5. 3. 8. 0.03 0.03 0.06 0.007 0.005
0.012 0.000 0.000 0.003 0.001
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
150. 118. 268. 1.65 1.30 2.95 0.000 0.000
0.000 0.000 0.105 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
702. 507. 1209. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
704. 568. 1273. 5.84 4.71 10.55 0.922 0.744
1.666 3.166 0.017 0.983 0.268
Total Cgn_Gas 23
6249. 4188. 10437. 51.21 33.86 85.07 4.652 3.093
7.744 0.000 0.000 4.514 1.231
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
191. 147. 338. 2.55 1.97 4.52 0.000 0.000
0.000 0.000 0.160 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
Total Ret.Scrubber                    37
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR & Scrub            38
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR & Scrub           39
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR                         40
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SCR            41
     618.       491.      1110.      5.85      4.64     10.49      0.146     0.116
 0.262       0.462       0.010          0.977          0.266
Total Ret.SNCR                        42
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SNCR           43
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR+Scrb                    44
    3246.      2578.      5825.     34.47     27.38     61.85      0.862     0.684
 1.546       2.721       0.057          5.759          1.571
Total Ret.SNCR+Scrub                  45
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Gas Reburn                  46
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR             47
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub             48
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                         49
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI              50
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI                51
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI               52
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                   53
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR          54
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                  55
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR         56
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                  57
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub          58
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total UPNY
   48837.      36245.      85082.   319.84   250.36   570.20    17.103   10.790
27.893      65.826       0.633        25.728         7.017
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
```

NOx

SO2 MER CO2 Carbon
Year: 2020, Region: DSNY (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Scrubbed Coal 2
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal_NOx 3
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Unscrubbed Coal 4
3063. 2038. 5100. 31.73 21.11 52.84 5.923 3.941
9.864 26.855 0.087 4.921 1.342
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
2750. 3380. 6131. 27.83 34.20 62.02 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
1237. 824. 2061. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
15856. 11816. 27672. 115.61 86.24 201.85 1.177 0.878
2.056 0.000 0.000 10.712 2.922
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Biomass 12
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Wind 15
29. 16. 45. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
361. 285. 646. 3.98 3.14 7.11 0.000 0.000
0.000 0.000 0.252 0.000 0.000

```
Total Fossil_Other                    19
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Pump Storage                    20
       0.       155.       155.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Int. Imports                    21
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Cgn_Coal                        22
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Cgn_Gas                         23
     351.       269.       620.      3.30      2.53      5.84      0.309     0.237
 0.546       0.000       0.000          0.310          0.084
Total Cgn_Oil                         24
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Cgn_Other                       25
      30.        23.        54.      0.13      0.10      0.23      0.000     0.000
 0.000       0.000       0.008          0.000          0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total NonCG IPP_Gas                   27
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total NonCG IPP_Other                 28
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Coal                        29
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Oil                         31
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Other                       32
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total SteamOnly Cogen                 33
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-CC                     34
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.O/G-CC                      35
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-IGCC                   36
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Scrubber                    37
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR & Scrub            38
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR & Scrub           39
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR                         40
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
```

0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total DSNY
   23677.     18807.     42485.   182.58   147.32   329.89     7.409    5.056
12.465      26.855       0.348        15.943         4.348
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: NYC      (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                           (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

```
Total Scrubbed Coal_NOx                1
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Scrubbed Coal                    2
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Unscrubbed Coal_NOx              3
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Unscrubbed Coal                  4
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Oil/Gas Steam                    5
       0.      1627.      1627.      0.00     15.52     15.52      0.000     1.063
 1.063       0.000       0.000          0.824          0.225
Total Oil/Gas Steam_Nox                6
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Nuclear                          7
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Hydro                            8
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Comb.Cycle Gas                   9
    7215.      4473.     11689.     51.92     32.45     84.37      0.868     0.617
 1.484       0.000       0.000          4.477          1.221
Total IGCC                            10
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Turbine                         11
     633.      1099.      1732.      6.03     10.98     17.00      0.303     0.556
 0.858       0.000       0.000          0.902          0.246
Total Biomass                         12
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Geothermal                      13
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Landfill Gas                    14
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Wind                            15
      27.        15.        41.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Fuel Cell                       16
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Solar                           17
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Non Fossil_Other                18
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Fossil_Other                    19
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Pump Storage                    20
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Int. Imports                    21
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Cgn_Coal                        22
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                        23
      41.        95.       137.     0.38     0.86     1.24     0.035    0.081
 0.115       0.000       0.000         0.066         0.018
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR+Scrub                 45
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Gas Reburn                 46
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                        49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI               51
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

```
Total Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NYC
    7916.      7309.     15226.    58.33    59.80   118.13     1.205    2.316
 3.521       0.000       0.000         6.269         1.710
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: LILC     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                  2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
10323. 7478. 17801. 73.23 53.10 126.33 0.807 0.595
1.402 0.000 0.000 6.704 1.828
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
100. 462. 562. 1.09 5.71 6.79 0.044 0.297
0.341 0.000 0.000 0.360 0.098
Total Biomass 12
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Wind 15
16. 9. 25. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
604. 476. 1080. 6.64 5.24 11.88 0.000 0.000
0.000 0.000 0.355 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Gas 23
256. 196. 453. 2.07 1.58 3.65 0.190 0.145
0.335 0.000 0.000 0.194 0.053
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
    1441.      1105.      2547.    10.41     7.98    18.39     0.104    0.080
 0.184       0.000       0.000         0.976         0.266
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total LILC
   12740.      9728.     22468.    93.43    73.61   167.04     1.145    1.117
 2.262       0.000       0.355         8.234         2.246
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: NENG     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
     324.       257.       581.     3.37     2.68     6.04     0.339    0.269
 0.607       0.755       0.008         0.563         0.153
Total Scrubbed Coal                 2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx           3
     739.       353.      1092.     7.64     3.65    11.30     0.883    0.432
 1.315       6.213       0.019         1.052         0.287
Total Unscrubbed Coal               4
     491.       390.       880.     4.77     3.79     8.57     0.622    0.494
 1.116       4.712       0.015         0.798         0.218
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
   20276.     14014.     34289.   204.84   141.55   346.39     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
```

```
    3489.      1724.      5212.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                  9
   41932.     30558.     72490.   317.88   232.22   550.10     4.824    3.597
 8.420       0.000       0.000        29.194         7.962
Total IGCC                           10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                        11
     107.       199.       306.     1.13     2.16     3.29     0.050    0.091
 0.141       0.000       0.000         0.175         0.048
Total Biomass                        12
    1033.       246.      1279.     9.20     2.17    11.37     0.092    0.022
 0.114       0.455       0.003         0.000         0.000
Total Geothermal                     13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                   14
    1155.       837.      1992.    11.85     8.59    20.44     1.457    1.057
 2.514       0.000       0.000         0.000         0.000
Total Wind                           15
    1470.       755.      2225.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                      16
       3.         2.         5.     0.03     0.01     0.04     0.005    0.002
 0.007       0.000       0.000         0.002         0.001
Total Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other               18
    2367.      1867.      4234.    26.04    20.53    46.57     0.000    0.000
 0.000       0.000       1.647         0.000         0.000
Total Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                   20
     569.       446.      1015.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                   21
    4671.      3371.      8042.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                       22
     308.       248.       556.     2.63     2.12     4.75     0.566    0.456
 1.022       2.614       0.012         0.443         0.121
Total Cgn_Gas                        23
    1077.       788.      1865.     9.08     6.68    15.76     0.519    0.379
 0.898       0.000       0.000         0.836         0.228
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
     429.       199.       628.     2.85     1.07     3.92     0.027    0.009
 0.036       0.144       0.010         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Blr_Gas                          30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Oil                          31
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Blr_Other                        32
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total SteamOnly Cogen                  33
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Rep.Coal-CC                      34
     955.       732.      1687.      6.89      5.29     12.18      0.069     0.053
 0.122       0.000       0.000          0.646          0.176
Total Rep.O/G-CC                       35
      78.        60.       138.      0.56      0.43      0.99      0.006     0.004
 0.010       0.000       0.000          0.053          0.014
Total Rep.Coal-IGCC                    36
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Scrubber                     37
     417.       332.       749.      4.11      3.26      7.37      0.485     0.385
 0.870       0.162       0.006          0.686          0.187
Total Ret.ExistSCR & Scrub             38
    1759.      1397.      3157.     17.34     13.77     31.11      0.858     0.682
 1.540       1.369       0.029          2.897          0.790
Total Ret.ExistSNCR & Scrub            39
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR                          40
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SCR             41
     789.       637.      1426.      7.64      6.16     13.80      0.191     0.154
 0.345       0.759       0.013          1.285          0.351
Total Ret.SNCR                         42
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SNCR            43
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR+Scrb                     44
    5571.      4424.      9995.     53.23     42.27     95.50      1.331     1.057
 2.387       3.921       0.079          8.893          2.425
Total Ret.SNCR+Scrub                   45
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Gas Reburn                   46
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR              47
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub              48
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                          49
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI               50
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI                 51
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                    65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring          69
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement            70
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement            71
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement           72
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement          73
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NENG
   90009.     63835.    153844.   691.07   498.42  1189.50    12.322    9.144
21.466      21.103       1.841        47.523        12.961
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: FRCC     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
    8931.      7093.     16024.    86.61    68.78   155.39     4.806    3.817
 8.623      14.398       0.057        14.470         3.946
Total Scrubbed Coal                 2
     726.       577.      1303.     7.63     6.06    13.68     1.252    0.994
 2.246       3.585       0.012         1.274         0.347
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    1287.      1022.      2308.    13.20    10.48    23.68     2.348    1.865
 4.213      11.841       0.035         2.205         0.601
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
   17603.     13703.     31306.   192.56   150.00   342.57     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
      83.        38.       121.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                9
   59338.     49992.    109330.   443.41   376.26   819.68     8.717    7.828
16.546       0.000       0.000        43.500        11.864
Total IGCC                         10
    1083.       837.      1921.     7.88     6.09    13.97     0.394    0.305
 0.699       0.000       0.003         1.301         0.355
Total Turbine                      11
    1323.      3243.      4566.    14.51    36.07    50.58     0.597    1.561
 2.158       0.000       0.000         2.685         0.732
```

Total Biomass 12
234. 181. 415. 2.16 1.67 3.83 0.022 0.017
0.038 0.153 0.001 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
9. 7. 16. 0.12 0.09 0.22 0.015 0.011
0.026 0.000 0.000 0.000 0.000
Total Wind 15
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
1869. 1474. 3343. 20.56 16.21 36.77 0.000 0.000
0.000 0.000 1.120 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Gas 23
491. 1506. 1997. 4.39 13.56 17.96 0.289 0.935
1.223 0.000 0.000 0.953 0.260
Total Cgn_Oil 24
0. 29. 29. 0.00 0.25 0.25 0.000 0.037
0.037 0.000 0.000 0.013 0.004
Total Cgn_Other 25
360. 278. 638. 2.99 2.31 5.30 0.023 0.017
0.040 0.160 0.001 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
   14316.     10981.     25297.   103.36    79.28   182.64     1.034    0.793
 1.826       0.000       0.000         9.693         2.644
Total Rep.Coal-IGCC                  36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
    3887.       3121.       7008.    37.91    30.44    68.35     0.948    0.761
 1.709      34.177       0.108         6.365         1.736
Total Ret.ExistScrub & SCR           41
   18560.     14740.     33300.   182.91   145.27   328.18     4.630    3.677
 8.308      76.011       0.120        30.561         8.335
Total Ret.SNCR                       42
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
    7831.       6219.     14050.    75.11    59.66   134.77     1.905    1.513
 3.418      16.846       0.054        12.550         3.423
Total Ret.SNCR+Scrub                 45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret. Biomass Cofiring          69
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CT Early Retirement            70
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CC Early Retirement            71
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total O/G Early Retirement           72
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Coal Early Retirement          73
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Nuke Early Retirement          74
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000

Total FRCC
  137930.    115042.    252972.  1195.32  1002.51  2197.83    26.979   24.132
51.111     157.173       1.510       125.572        34.247
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
```

(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration

NOx
SO2 MER CO2 Carbon
Year: 2020, Region: VACA (Emissions By Plant Type)
Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
18838. 14961. 33799. 183.88 146.04 329.91 5.856 4.651
10.507 22.486 0.118 30.722 8.379
Total Scrubbed Coal 2
2050. 1628. 3678. 21.32 16.93 38.26 1.973 1.567
3.541 2.061 0.021 3.563 0.972
Total Unscrubbed Coal_NOx 3
5840. 3826. 9666. 58.35 38.09 96.44 8.171 5.209
13.380 53.041 0.177 8.981 2.449
Total Unscrubbed Coal 4
13988. 9398. 23386. 143.02 96.41 239.43 26.971 18.350
45.321 129.880 0.435 22.296 6.081
Total Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Nuclear 7
68741. 53769. 122510. 703.15 550.51 1253.66 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
6437. 3139. 9575. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
26030. 17150. 43180. 190.52 125.71 316.23 2.983 2.095
5.079 0.000 0.000 16.782 4.577
Total IGCC 10
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Turbine 11
4441. 8290. 12730. 37.97 72.95 110.92 1.898 3.556
5.454 0.000 0.000 5.886 1.605
Total Biomass 12
204. 157. 361. 1.88 1.45 3.33 0.019 0.015
0.033 0.133 0.001 0.000 0.000
Total Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Landfill Gas 14
112. 85. 197. 1.53 1.16 2.69 0.188 0.143
0.331 0.000 0.000 0.000 0.000
Total Wind 15
20. 11. 31. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
617. 487. 1104. 6.79 5.35 12.14 0.000 0.000
0.000 0.000 0.431 0.000 0.000
Total Fossil_Other 19
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Pump Storage 20
687. 1410. 2097. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
3882. 3133. 7015. 33.49 27.02 60.51 6.222 5.022
11.244 29.672 0.111 5.635 1.537
Total Cgn_Gas 23
4657. 2494. 7151. 34.51 18.96 53.47 0.805 0.546
1.351 0.000 0.000 2.838 0.774
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
191. 147. 338. 1.44 1.11 2.55 0.013 0.010
0.022 0.089 0.012 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub          38
   28120.     22334.     50454.   270.27   214.65   484.92     5.779    4.590
10.368      32.435       0.281        45.157        12.316
Total Ret.ExistSNCR & Scrub         39
      69.        55.       124.     0.69     0.55     1.24     0.076    0.060
 0.136       0.075       0.002         0.116         0.032
Total Ret.SCR                       40
    1955.      1464.      3419.    19.86    14.85    34.72     0.536    0.397
 0.933      19.093       0.057         3.233         0.882
Total Ret.ExistScrub & SCR          41
    1121.       890.      2011.    11.07     8.79    19.86     0.315    0.251
 0.566       1.400       0.005         1.850         0.504
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                  44
   22810.     18127.     40937.   219.64   174.55   394.19     5.517    4.384
 9.901      12.271       0.104        36.708        10.011
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI            50
     693.       550.      1244.     7.21     5.72    12.93     1.388    1.102
 2.490       2.328       0.003         1.204         0.328
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total VACA
  211501.    163506.    375007.  1946.58  1520.83  3467.41    68.710   51.947  1
20.657     304.965       1.759       184.971        50.447
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
              SO2         MER           CO2           Carbon
```

Year: 2020, Region: TVA (Emissions By Plant Type)

	Generation			Trillion			Emission			Emission			Emission		
	(GWh)			(Btu)			(1000 Tons)			(1000 Tons)	(Tons)		(Mil Tonnes)	(Mil Tonnes)	
	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total
Total Scrubbed Coal_NOx				1											
	24905.	19780.	44685.	243.93	193.74	437.67	8.535	6.779	15.314	54.709	0.176	40.757	11.116		
Total Scrubbed Coal				2											
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Unscrubbed Coal_NOx				3											
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Unscrubbed Coal				4											
	12403.	9851.	22254.	127.60	101.35	228.95	23.902	18.983	42.885	116.969	0.263	21.320	5.815		
Total Oil/Gas Steam				5											
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Oil/Gas Steam_Nox				6											
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Nuclear				7											
	32863.	25682.	58546.	341.61	266.75	608.36	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Hydro				8											
	11469.	6255.	17724.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Comb.Cycle Gas				9											
	10206.	6650.	16855.	76.54	49.87	126.41	0.765	0.499	1.264	0.000	0.000	6.709	1.830		
Total IGCC				10											
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Turbine				11											
	0.	976.	976.	0.00	10.70	10.70	0.000	0.435	0.435	0.000	0.000	0.568	0.155		
Total Biomass				12											
	4.	3.	8.	0.04	0.03	0.07	0.000	0.000	0.001	0.003	0.000	0.000	0.000		
Total Geothermal				13											
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Landfill Gas				14											
	9.	7.	16.	0.12	0.09	0.22	0.015	0.011	0.026	0.000	0.000	0.000	0.000		
Total Wind				15											
	2.	1.	3.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Fuel Cell				16											
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Solar				17											
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Non Fossil_Other				18											
	53.	42.	95.	0.58	0.46	1.04	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Total Fossil_Other				19											

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
     541.       687.      1228.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
    4336.      4086.      8423.    32.52    30.83    63.35     0.325    0.326
 0.651       0.000       0.000         3.362         0.917
Total Cgn_Oil                       24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other               28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                       31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                  37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub          38
   14318.     11372.     25690.   139.63   110.89   250.52     3.392    2.694
 6.085      17.928       0.082        23.329         6.362
Total Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                       40
    2341.      1859.      4200.    24.52    19.48    44.00     0.613    0.487
 1.100      21.998       0.058         4.097         1.117
```

```
Total Ret.ExistScrub & SCR          41
     515.       409.       923.     5.48     4.35     9.83     0.137    0.109
 0.246       2.950       0.002        0.916         0.250
Total Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.SCR+Scrb                  44
    6858.      5447.     12306.    68.85    54.68   123.53     1.721    1.367
 3.088       5.349       0.036       11.503         3.137
Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000        0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total TVA
  120824.     93107.    213931.  1061.43   843.22  1904.65    39.406   31.690
71.096     219.905       0.617       112.561        30.698
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: SOU      (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                  2
     423.       336.       760.     4.90     3.90     8.80     0.839    0.666
 1.505       0.271       0.008         0.820         0.224
Total Unscrubbed Coal_NOx            3
    5565.      4420.      9985.    52.53    41.72    94.24     0.867    0.688
 1.555      47.121       0.124         8.776         2.393
Total Unscrubbed Coal                4
   14288.     13019.     27307.   140.67   130.09   270.76    25.327   23.457
48.784     144.342       0.431        25.214         6.877
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   26939.     20761.     47700.   294.26   226.87   521.14     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    6138.      2706.      8844.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
   84093.     63512.    147605.   615.53   465.50  1081.04     6.314    4.789
11.102       0.000       0.000        57.371        15.647
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
    2060.      9675.     11736.    17.62    90.66   108.28     0.881    4.167
 5.047       0.000       0.000         5.746         1.567
Total Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
      40.        31.        71.     0.55     0.42     0.97     0.068    0.052
 0.119       0.000       0.000         0.000         0.000
Total Wind                          15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.       604.       604.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       4.         3.         7.     0.04     0.03     0.07     0.007    0.006
 0.013       0.036       0.000         0.006         0.002
```

Total Cgn_Gas 23
6488. 5007. 11494. 49.57 38.32 87.89 0.809 0.629
1.439 0.000 0.000 4.664 1.272
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
22. 17. 38. 0.19 0.14 0.33 0.002 0.001
0.003 0.013 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
541. 429. 970. 5.53 4.39 9.93 0.996 0.791
1.787 0.298 0.009 0.924 0.252
Total Ret.ExistSCR & Scrub 38
25150. 19975. 45125. 243.75 193.59 437.34 5.218 4.144
9.362 33.724 0.223 40.726 11.107
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
10968. 8711. 19679. 103.49 82.19 185.68 2.758 2.190
4.948 92.841 0.281 17.291 4.716
Total Ret.ExistScrub & SCR 41
3619. 2874. 6493. 37.99 30.17 68.16 0.950 0.754
1.704 9.482 0.020 6.348 1.731
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
32351. 25694. 58045. 321.15 255.06 576.21 8.212 6.523

14.735 41.847 0.261 53.658 14.634
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total SOU
  218689.    177775.    396464.  1887.77  1563.06  3450.83    53.246   48.857  1
02.104     369.974       1.356       221.545        60.421
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: ENTG     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal_NOx           3
    4814.      3824.      8638.    48.38    38.43    86.81     1.766    1.403
 3.169      20.400       0.114         8.084         2.205
Total Unscrubbed Coal               4
    2283.      1813.      4095.    23.74    18.85    42.59     3.312    2.630
 5.942      21.296       0.073         3.966         1.082
```

```
Total Oil/Gas Steam                    5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox                6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                          7
   24423.     18100.     42523.   270.96   200.93   471.89     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                            8
     646.       474.      1120.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                   9
   32549.     30441.     62990.   244.12   228.46   472.58     2.441    2.313
 4.754       0.000       0.000        25.080         6.840
Total IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                         11
       0.       288.       288.     0.00     3.15     3.15     0.000    0.127
 0.127       0.000       0.000         0.167         0.046
Total Biomass                         12
      43.        33.        77.     0.40     0.31     0.71     0.004    0.003
 0.007       0.028       0.000         0.000         0.000
Total Geothermal                      13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                    14
      27.        20.        47.     0.37     0.28     0.65     0.045    0.034
 0.079       0.000       0.000         0.000         0.000
Total Wind                            15
      57.        32.        88.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                           17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
     137.       108.       244.     1.50     1.19     2.69     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                    19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                    20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                         23
    9586.      5086.     14672.    71.70    37.56   109.26     0.750    0.616
 1.366       0.000       0.000         5.798         1.581
Total Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
     795.       607.      1402.     4.81     3.67     8.49     0.942    0.719
 1.661       0.021       0.083         0.000         0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
   11916.      9464.      21380.   124.14    98.59   222.73    19.428   15.430
34.858      16.705       0.361       20.741         5.657
Total Ret.ExistSCR & Scrub           38
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
    1868.      1483.       3351.    18.84    14.96    33.81     0.537    0.426
 0.963       7.945       0.075         3.262         0.890
Total Ret.ExistScrub & SCR           41
    2781.      2208.       4989.    27.95    22.19    50.14     0.699    0.555
 1.254       5.616       0.055         4.837         1.319
Total Ret.SNCR                       42
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
    8672.      6887.      15559.    92.17    73.20   165.37     2.304    1.830
 4.134      12.402       0.268        15.399         4.200
Total Ret.SNCR+Scrub                 45
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                          49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI               50
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI                 51
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI                52
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                    53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR           54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                   55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR          56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                   57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub           58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub          59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI     60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI      61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI      62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI            63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI           64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                      65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                     66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 30+10 yrs)      67
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 40+20 yrs)      68
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret. Biomass Cofiring            69
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

```
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total ENTG
  100596.     80868.    181464.   929.07   741.79  1670.86    32.228   26.086
58.314      84.413       1.029        87.336        23.819
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: SPPN     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
    4524.      3593.      8116.    43.72    34.72    78.45     0.464    0.369
 0.833       6.636       0.117         7.447         2.031
Total Scrubbed Coal                 2
   18584.     14760.     33344.   199.02   158.07   357.09    46.918   37.263
84.181      27.824       0.807        34.099         9.300
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    7056.      5436.     12492.    75.84    58.32   134.16    18.343   14.130
32.473      55.112       0.242        12.619         3.442
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
    5668.      4084.      9752.    55.33    39.87    95.20     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
     601.       418.      1020.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
    3815.      2223.      6037.    28.61    16.67    45.28     0.286    0.167
 0.453       0.000       0.000         2.403         0.655
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
     625.      2296.      2921.     5.35    25.08    30.43     0.267    1.261
 1.529       0.000       0.000         1.615         0.440
Total Biomass                       12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Wind                          15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
      32.        37.        69.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
       0.         8.         8.     0.00     0.08     0.08     0.000    0.003
 0.003       0.000       0.000         0.005         0.001
Total Cgn_Oil                       24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other               28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                       30
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
    1619.      1286.      2904.    15.70    12.47    28.17     0.542    0.430
 0.972      14.085       0.037         2.623         0.715
Total Ret.ExistScrub & SCR           41
    4059.      3224.      7283.    41.37    32.86    74.24     1.034    0.822
 1.856      12.350       0.082         7.162         1.953
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
     857.       681.      1538.     9.89     7.86    17.75     0.282    0.224
 0.506       0.497       0.020         1.712         0.467
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Coal Early Retirement 73
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total SPPN
   47440.     38045.     85485.   474.85   386.00   860.84    68.137   54.669  1
22.806     116.504       1.305        69.684        19.005
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: SPPS     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
    2158.       1714.       3872.    23.20    18.43    41.63     3.608    2.865
 6.473       2.768       0.088         4.016         1.095
Total Unscrubbed Coal_NOx           3
    2034.       1615.       3649.    21.76    17.28    39.03     4.938    3.922
 8.861      14.247       0.123         3.766         1.027
Total Unscrubbed Coal               4
   24942.      19810.      44752.   249.98   198.54   448.51    45.902   36.457
82.359     155.328       1.109        43.265        11.800
Total Oil/Gas Steam                 5
       0.       6539.       6539.     0.00    65.38    65.38     0.000    8.740
 8.740       0.000       0.000         3.470         0.946
Total Oil/Gas Steam_Nox             6
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
    4702.       3448.       8150.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                9
   31235.      28352.      59588.   236.06   214.77   450.82     3.265    3.141
 6.406       0.000       0.000        23.925         6.525
Total IGCC                         10
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                      11
     417.       2215.       2632.     3.89    20.40    24.29     0.181    1.006
 1.187       0.000       0.000         1.289         0.352
Total Biomass                      12
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                  14
      40.        31.        71.     0.55     0.42     0.97     0.068    0.052
 0.119       0.000       0.000         0.000         0.000
Total Wind                          15
      66.        37.       102.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
     101.        80.       181.     0.48     0.38     0.87     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.        43.        43.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
    1243.      1003.      2246.    10.63     8.57    19.20     2.067    1.668
 3.734       9.600       0.033         1.788         0.488
Total Cgn_Gas                       23
    3855.      3697.      7552.    29.15    29.01    58.17     0.345    0.553
 0.899       0.000       0.000         3.087         0.842
Total Cgn_Oil                       24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
     156.       121.       277.     0.66     0.51     1.17     0.001    0.001
 0.001       0.005       0.000         0.000         0.000
Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other               28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                       30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                       31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen               33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
   10511.      8348.     18859.   109.93    87.31   197.25     2.748    2.183
 4.931       5.917       0.050        18.368         5.009
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI               51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total SPPS
   81461.     77051.    158512.   686.29   661.00  1347.29    63.123   60.587  1
23.710     187.866       1.402       102.975        28.084
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
```

(**) Industrial Boiler Generation in BBtu, not included in the total regional generation

---

Year: 2020, Region: CALI (Emissions By Plant Type)

	Generation (GWh)			Trillion (Btu)			SO2 Emission (1000 Tons)	MER Emission (Tons)	CO2 Emission (Mil Tonnes)	Carbon Emission (Mil Tonnes)	NOx Emission (1000 Tons)		
	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total							
Total Scrubbed Coal_NOx	1												
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	
Total Scrubbed Coal	2												
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	
Total Unscrubbed Coal_NOx	3												
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	
Total Unscrubbed Coal	4												
	710.	564.	1273.	7.79	6.19	13.97	0.802	0.637	1.438	6.987	0.029	1.301	0.355
Total Oil/Gas Steam	5												
	0.	1865.	1865.	0.00	17.78	17.78	0.000	0.178	0.178	0.000	0.000	0.944	0.257
Total Oil/Gas Steam_Nox	6												
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Nuclear	7												
	20241.	15089.	35329.	206.46	153.43	359.88	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Hydro	8												
	16750.	17655.	34405.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Comb.Cycle Gas	9												
	87471.	64493.	151964.	630.21	465.78	1095.99	6.348	4.661	11.009	0.000	0.000	58.165	15.863
Total IGCC	10												
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Turbine	11												
	167.	665.	832.	1.53	7.80	9.34	0.078	0.321	0.399	0.000	0.000	0.496	0.135
Total Biomass	12												
	1872.	1447.	3319.	17.09	13.21	30.30	0.171	0.132	0.303	1.212	0.009	0.000	0.000
Total Geothermal	13												
	11344.	8966.	20310.	291.69	230.53	522.21	0.000	0.000	0.000	0.000	0.775	0.000	0.000
Total Landfill Gas	14												
	966.	737.	1703.	12.24	9.34	21.58	1.506	1.148	2.654	0.000	0.000	0.000	0.000
Total Wind	15												
	4635.	2599.	7234.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
516. 274. 790. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
785. 619. 1403. 9.00 7.10 16.10 0.000 0.000
0.000 0.000 0.225 0.000 0.000
Total Fossil_Other 19
89. 68. 158. 0.98 0.75 1.73 0.064 0.049
0.114 0.000 0.000 0.000 0.000
Total Pump Storage 20
0. 428. 428. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
1356. 1094. 2450. 12.37 9.98 22.36 0.557 0.449
1.006 10.319 0.041 2.082 0.568
Total Cgn_Gas 23
23505. 10795. 34300. 200.07 87.89 287.96 3.888 1.524
5.412 0.000 0.000 15.282 4.168
Total Cgn_Oil 24
1741. 1124. 2864. 13.16 8.50 21.66 0.099 0.064
0.162 0.000 0.000 1.150 0.314
Total Cgn_Other 25
576. 444. 1020. 4.10 3.16 7.26 0.078 0.060
0.139 0.210 0.016 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
18946. 14532. 33478. 136.79 104.92 241.71 1.368 1.049
2.417 0.000 0.000 12.828 3.498
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total CALI
  191670.    143458.    335127.  1543.49  1126.36  2669.85    14.959   10.273
25.232      18.728       1.093        92.247        25.158
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: PNW      (Emissions By Plant Type)
```

```
            Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                  2
    5561.      4417.      9978.    56.95    45.23   102.17    11.389    9.046
20.435       5.364       0.237         9.858         2.688
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
    2212.      1757.      3969.    23.92    19.00    42.93     5.280    4.194
 9.474      15.782       0.095         4.135         1.128
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
    5713.      3138.      8851.    57.49    31.58    89.07     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
   63340.     47747.    111087.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
   32744.     24251.     56995.   240.96   178.72   419.67     3.594    2.696
 6.290       0.000       0.000        22.272         6.074
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
      14.      2491.      2505.     0.13    26.77    26.90     0.008    1.199
 1.208       0.000       0.000         1.428         0.389
Total Biomass                       12
      26.        20.        46.     0.21     0.16     0.37     0.002    0.002
 0.004       0.015       0.000         0.000         0.000
Total Geothermal                    13
      34.        27.        61.     1.10     0.87     1.97     0.000    0.000
 0.000       0.000       0.004         0.000         0.000
Total Landfill Gas                  14
      94.        72.       166.     1.28     0.98     2.26     0.158    0.120
 0.278       0.000       0.000         0.000         0.000
Total Wind                          15
     185.       104.       290.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
     256.       202.       457.     2.81     2.22     5.03     0.000    0.000
 0.000       0.000       0.102         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
    7785.       5618.      13403.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
    5024.       3854.       8878.    39.24    30.10    69.33     1.126    0.864
 1.989       0.000       0.000         3.680         1.004
Total Cgn_Oil                       24
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                     25
     416.        321.        738.     3.55     2.75     6.30     0.036    0.027
 0.063       0.252       0.002         0.000         0.000
Total NonCG IPP_Coal                26
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                 27
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other               28
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                      29
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                       30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                       31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                     32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                   34
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                    35
     421.        323.        744.     3.04     2.33     5.37     0.030    0.023
 0.054       0.000       0.000         0.285         0.078
Total Rep.Coal-IGCC                 36
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                  37
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub          38
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub         39
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                       40
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR          41
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR                        42
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub & SNCR           43
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR+Scrb                    44
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR+Scrub                  45
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Gas Reburn                  46
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub+GasR             47
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.GasReburn+Scrub             48
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI                         49
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI              50
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI                51
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI               52
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                   53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR          54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                  55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR         56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                  57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub          58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub         59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI    60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI     61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI     62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

```
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total PNW
  123825.     94342.    218167.   430.69   340.70   771.39    21.624   18.171
39.795      21.413       0.440        41.658        11.361
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: AZNM     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                  2
   37757.     29988.     67745.   384.85   305.66   690.51    86.695   68.855  1
55.549      82.328       1.039        65.286        17.805
Total Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal                4
    1726.      1371.      3098.    17.84    14.17    32.00     3.766    2.991
 6.757      12.432       0.033         2.980         0.813
Total Oil/Gas Steam                  5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                        7
   16759.     13773.     30532.   176.42   144.93   321.35     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                          8
    3484.      3538.      7022.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                 9
   57462.     42866.    100328.   424.36   317.51   741.86     4.939    3.877
 8.816       0.000       0.000        39.371        10.738
Total IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                       11
       0.       301.       301.     0.00     3.31     3.31     0.000    0.136
 0.136       0.000       0.000         0.176         0.048
Total Biomass                       12
     273.       201.       475.     2.23     1.64     3.87     0.022    0.016
 0.039       0.155       0.001         0.000         0.000
Total Geothermal                    13
    1368.       996.      2363.    44.29    32.24    76.53     0.000    0.000
 0.000       0.000       0.141         0.000         0.000
Total Landfill Gas                  14
      74.        56.       130.     0.92     0.69     1.62     0.113    0.085
 0.199       0.000       0.000         0.000         0.000
Total Wind                          15
     603.       314.       917.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                     16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                         17
      21.        15.        36.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                  20
      38.        46.        84.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                       23
```

```
    4484.      3543.      8027.    34.66    27.65    62.31     0.875    0.747
 1.622       0.000       0.000         3.307         0.902
Total Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                      25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Coal                       29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Gas                        30
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Oil                        31
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Blr_Other                      32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Scrubber                   37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR & Scrub           38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR & Scrub          39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SCR           41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR                       42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub & SNCR          43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total AZNM
  124050.     97007.    221057.  1085.57   847.79  1933.37    96.410   76.707  1
73.117      94.915       1.214       111.119        30.305
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: RMPA     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
     332.       264.       596.     2.99     2.37     5.36     0.164    0.131
 0.295       0.201       0.001         0.499         0.136
Total Scrubbed Coal                 2
   17256.     13705.     30962.   180.44   143.31   323.75    33.663   26.736
60.398      24.881       0.314        30.503         8.319
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    8167.      6487.     14654.    85.70    68.07   153.77    21.904   17.397
39.301      52.468       0.117        14.642         3.993
Total Oil/Gas Steam                 5
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox                6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                          7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                            8
    3767.      3826.      7592.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Comb.Cycle Gas                   9
    5060.      3517.      8577.    38.42    26.71    65.13     0.596    0.414
 1.010       0.000       0.000         3.457         0.943
Total IGCC                            10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Turbine                         11
     258.       224.       482.     2.82     2.45     5.27     0.117    0.102
 0.218       0.000       0.000         0.280         0.076
Total Biomass                         12
       4.         3.         8.     0.03     0.03     0.06     0.000    0.000
 0.001       0.002       0.000         0.000         0.000
Total Geothermal                      13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Landfill Gas                    14
       4.         3.         8.     0.06     0.05     0.11     0.008    0.006
 0.013       0.000       0.000         0.000         0.000
Total Wind                            15
     648.       363.      1011.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Solar                           17
       5.         3.         7.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Non Fossil_Other                18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Fossil_Other                    19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Pump Storage                    20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Int. Imports                    21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Gas                         23
     821.       210.      1030.     7.09     1.82     8.91     0.406    0.104
 0.510       0.000       0.000         0.473         0.129
Total Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Cgn_Other                       25
      30.        23.        54.     0.24     0.19     0.43     0.002    0.002
 0.004       0.017       0.000         0.000         0.000
Total NonCG IPP_Coal                  26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SCR 53
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SCR 54
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & SNCR 55
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI & Srub 57
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI&Scrub 58
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI&Scrub 59
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ExistScrub&ACI 60
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ExistScrub&ACI 61
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistNOx&ExistScrub&ACI 62
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.O/G SNCR 66
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 30+10 yrs) 67
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Nuclear (age 40+20 yrs) 68
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret. Biomass Cofiring 69
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total CT Early Retirement 70

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total RMPA
   36353.     28628.     64981.   317.81   244.99   562.81    56.859   44.891  1
01.750      77.571       0.433        49.854        13.597
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration


-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Region: NWPE     (Emissions By Plant Type)
             Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Total Scrubbed Coal_NOx             1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Scrubbed Coal                 2
   43487.     34352.     77840.   444.94   351.46   796.40    93.567   73.928  1
67.495      46.347       0.779        74.905        20.429
Total Unscrubbed Coal_NOx           3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Unscrubbed Coal               4
    7819.      6210.     14029.    80.57    63.99   144.57    17.408   13.826
31.234      57.684       0.214        13.624         3.716
Total Oil/Gas Steam                 5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Oil/Gas Steam_Nox             6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuclear                       7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Hydro                         8
    2460.      2498.      4958.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

Total Comb.Cycle Gas 9
885. 825. 1710. 6.64 6.19 12.82 0.066 0.062
0.128 0.000 0.000 0.681 0.186
Total IGCC 10
433. 335. 768. 3.15 2.44 5.59 0.095 0.073
0.168 0.000 0.001 0.520 0.142
Total Turbine 11
49. 251. 299. 0.44 2.73 3.17 0.028 0.116
0.144 0.000 0.000 0.168 0.046
Total Biomass 12
22. 17. 38. 0.17 0.13 0.31 0.002 0.001
0.003 0.012 0.000 0.000 0.000
Total Geothermal 13
1026. 811. 1837. 32.60 25.77 58.37 0.000 0.000
0.000 0.000 0.106 0.000 0.000
Total Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Wind 15
62. 35. 97. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Solar 17
38. 20. 59. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fossil_Other 19
183. 140. 323. 2.02 1.54 3.56 0.706 0.538
1.244 0.012 0.018 0.000 0.000
Total Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
223. 180. 402. 1.81 1.46 3.28 0.325 0.263
0.588 1.638 0.007 0.316 0.086
Total Cgn_Gas 23
45. 34. 79. 0.29 0.22 0.51 0.021 0.016
0.037 0.000 0.000 0.027 0.007
Total Cgn_Oil 24
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Other 25
43. 33. 77. 0.18 0.14 0.32 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.O/G-CC 35
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR & Scrub 38
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR & Scrub 39
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR 40
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SCR 41
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR 42
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub & SNCR 43
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SCR+Scrb 44
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.SNCR+Scrub 45
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Gas Reburn 46
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub+GasR 47
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.GasReburn+Scrub 48
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistScrub&ACI 50
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSCR&ACI 51
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.ExistSNCR&ACI 52

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SCR                  53
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & SNCR                 55
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ACI & Srub                 57
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.ExistNOx&ExistScrub&ACI    62
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SCR & Scrub & ACI          63
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.SNCR & Scrub & ACI         64
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SCR                    65
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.O/G SNCR                   66
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 30+10 yrs)    67
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret.Nuclear (age 40+20 yrs)    68
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Ret. Biomass Cofiring          69
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CT Early Retirement            70
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total CC Early Retirement            71
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total O/G Early Retirement           72
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
Total Coal Early Retirement          73
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

```
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NWPE
   56775.     45741.    102516.   572.82   456.07  1028.89   112.218   88.823  2
01.042     105.694       1.126        90.241        24.611
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler Generation in BBtu, not included in the total regional ge
neration




-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Scrubbed Coal_NOx              1         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Scrubbed Coal_NOx              1
      83.        66.       149.     0.86     0.69     1.55     0.168    0.134
 0.302       0.258       0.000         0.144         0.039
ECAO    Scrubbed Coal_NOx              1
   40273.     31882.     72155.   396.73   313.83   710.56    13.488   10.463
23.951      91.656       0.408        66.169        18.046
ERCT    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Scrubbed Coal_NOx              1
    1241.       986.      2226.    12.55     9.97    22.53     2.052    1.630
 3.682       2.630       0.047         2.098         0.572
MACW    Scrubbed Coal_NOx              1
    4856.      3856.      8712.    45.81    36.39    82.20     0.701    0.556
 1.257       6.960       0.058         7.655         2.088
MACS    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Scrubbed Coal_NOx              1
     249.       198.       447.     2.49     1.97     4.46     0.257    0.204
 0.460       0.557       0.001         0.415         0.113
MAPP    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Scrubbed Coal_NOx              1
    3453.      2742.      6195.    31.97    25.39    57.35     0.671    0.533
 1.204       6.333       0.053         5.341         1.457
DSNY    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
NYC     Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Scrubbed Coal_NOx              1
     324.       257.       581.     3.37     2.68     6.04     0.339    0.269
 0.607       0.755       0.008         0.563         0.153
FRCC    Scrubbed Coal_NOx              1
    8931.      7093.     16024.    86.61    68.78   155.39     4.806    3.817
 8.623      14.398       0.057        14.470         3.946
VACA    Scrubbed Coal_NOx              1
   18838.     14961.     33799.   183.88   146.04   329.91     5.856    4.651
10.507      22.486       0.118        30.722         8.379
TVA     Scrubbed Coal_NOx              1
   24905.     19780.     44685.   243.93   193.74   437.67     8.535    6.779
15.314      54.709       0.176        40.757        11.116
SOU     Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Scrubbed Coal_NOx              1
    4524.      3593.      8116.    43.72    34.72    78.45     0.464    0.369
 0.833       6.636       0.117         7.447         2.031
SPPS    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Scrubbed Coal_NOx              1
     332.       264.       596.     2.99     2.37     5.36     0.164    0.131
 0.295       0.201       0.001         0.499         0.136
NWPE    Scrubbed Coal_NOx              1
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Scrubbed Coal_NOx             1
  108008.     85678.    193686.  1054.90   836.56  1891.46    37.501   29.535
67.036     207.580       1.044       176.280        48.076
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Scrubbed Coal                 2         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
        (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)
```

		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Scrubbed Coal			2					
		477.	379.	856.	5.40	4.29	9.69	0.846	0.672
1.518	0.457	0.011		0.902		0.246			
ECAO	Scrubbed Coal			2					
		2021.	1480.	3501.	21.04	15.34	36.38	5.512	3.919
9.430	7.956	0.071		3.388		0.924			
ERCT	Scrubbed Coal			2					
		13971.	15806.	29776.	147.57	169.61	317.19	23.428	26.573
50.002	91.460	0.784		30.884		8.423			
MACE	Scrubbed Coal			2					
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000			
MACW	Scrubbed Coal			2					
		133.	105.	238.	1.38	1.10	2.48	0.277	0.220
0.497	0.446	0.006		0.231		0.063			
MACS	Scrubbed Coal			2					
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000			
WUMS	Scrubbed Coal			2					
		552.	438.	990.	6.07	4.82	10.89	0.940	0.747
1.687	4.286	0.008		1.015		0.277			
MANO	Scrubbed Coal			2					
		813.	646.	1459.	9.14	7.26	16.41	2.491	1.978
4.470	6.680	0.035		1.528		0.417			
MAPP	Scrubbed Coal			2					
		24208.	18562.	42770.	262.35	201.20	463.55	51.607	39.014
90.621	82.279	1.210		44.849		12.232			
UPNY	Scrubbed Coal			2					
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000			
DSNY	Scrubbed Coal			2					
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000			
NYC	Scrubbed Coal			2					
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000			
LILC	Scrubbed Coal			2					
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000			
NENG	Scrubbed Coal			2					
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000			
FRCC	Scrubbed Coal			2					
		726.	577.	1303.	7.63	6.06	13.68	1.252	0.994
2.246	3.585	0.012		1.274		0.347			
VACA	Scrubbed Coal			2					
		2050.	1628.	3678.	21.32	16.93	38.26	1.973	1.567
3.541	2.061	0.021		3.563		0.972			
TVA	Scrubbed Coal			2					
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000			
SOU	Scrubbed Coal			2					
		423.	336.	760.	4.90	3.90	8.80	0.839	0.666
1.505	0.271	0.008		0.820		0.224			
ENTG	Scrubbed Coal			2					
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000		0.000		0.000			
SPPN	Scrubbed Coal			2					
		18584.	14760.	33344.	199.02	158.07	357.09	46.918	37.263
84.181	27.824	0.807		34.099		9.300			
SPPS	Scrubbed Coal			2					

```
    2158.      1714.      3872.    23.20    18.43    41.63     3.608    2.865
 6.473       2.768       0.088         4.016         1.095
CALI    Scrubbed Coal                   2
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Scrubbed Coal                   2
    5561.      4417.      9978.    56.95    45.23   102.17    11.389    9.046
20.435       5.364       0.237         9.858         2.688
AZNM    Scrubbed Coal                   2
   37757.     29988.     67745.   384.85   305.66   690.51    86.695   68.855  1
55.549      82.328       1.039        65.286        17.805
RMPA    Scrubbed Coal                   2
   17256.     13705.     30962.   180.44   143.31   323.75    33.663   26.736
60.398      24.881       0.314        30.503         8.319
NWPE    Scrubbed Coal                   2
   43487.     34352.     77840.   444.94   351.46   796.40    93.567   73.928  1
67.495      46.347       0.779        74.905        20.429

Total Scrubbed Coal                 2
  170180.    138894.    309073.  1776.22  1452.67  3228.89   365.005  295.043  6
60.048     388.994       5.430       307.118        83.760
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Unscrubbed Coal_NOx            3         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Unscrubbed Coal_NOx             3
   12533.      9954.     22488.   115.39    91.65   207.04     2.171    1.725
 3.896     103.521       0.456        19.970         5.446
ECAO    Unscrubbed Coal_NOx             3
    2752.      1889.      4640.    25.54    17.54    43.08     3.843    2.623
 6.467      23.694       0.071         4.012         1.094
ERCT    Unscrubbed Coal_NOx             3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Unscrubbed Coal_NOx             3
    4685.      3045.      7730.    47.15    30.50    77.65     5.311    3.447
 8.758      42.706       0.148         7.231         1.972
MACW    Unscrubbed Coal_NOx             3
     363.       288.       651.     3.62     2.87     6.49     0.676    0.537
 1.213       3.568       0.011         0.604         0.165
MACS    Unscrubbed Coal_NOx             3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Unscrubbed Coal_NOx             3
     285.       226.       511.     3.06     2.43     5.49     0.685    0.544
 1.230       1.878       0.012         0.530         0.144
MANO    Unscrubbed Coal_NOx             3
    1212.       806.      2018.    11.83     7.87    19.71     1.745    1.161
 2.907       6.700       0.062         1.901         0.519
```

```
MAPP    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Unscrubbed Coal_NOx            3
    1502.      1076.      2579.    14.92    10.66    25.58     1.768    1.254
 3.022      14.068       0.042         2.382         0.650
DSNY    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Unscrubbed Coal_NOx            3
     739.       353.      1092.     7.64     3.65    11.30     0.883    0.432
 1.315       6.213       0.019         1.052         0.287
FRCC    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Unscrubbed Coal_NOx            3
    5840.      3826.      9666.    58.35    38.09    96.44     8.171    5.209
13.380      53.041       0.177         8.981         2.449
TVA     Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Unscrubbed Coal_NOx            3
    5565.      4420.      9985.    52.53    41.72    94.24     0.867    0.688
 1.555      47.121       0.124         8.776         2.393
ENTG    Unscrubbed Coal_NOx            3
    4814.      3824.      8638.    48.38    38.43    86.81     1.766    1.403
 3.169      20.400       0.114         8.084         2.205
SPPN    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Unscrubbed Coal_NOx            3
    2034.      1615.      3649.    21.76    17.28    39.03     4.938    3.922
 8.861      14.247       0.123         3.766         1.027
CALI    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Unscrubbed Coal_NOx            3
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Unscrubbed Coal_NOx            3
   42325.     31322.     73647.   410.17   302.68   712.85    32.825   22.946
55.771     337.157       1.358        67.287        18.351
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

NOx
SO2 MER CO2 Carbon
Year: 2020, Plant Type: Unscrubbed Coal 4 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Unscrubbed Coal 4
17959. 14255. 32214. 178.68 141.82 320.50 30.503 24.205
54.708 144.872 0.507 30.156 8.224
ECAO Unscrubbed Coal 4
22144. 16258. 38402. 227.94 167.57 395.51 44.138 32.292
76.430 214.753 0.752 37.069 10.110
ERCT Unscrubbed Coal 4
6142. 4878. 11021. 59.32 47.11 106.43 9.190 7.299
16.488 37.791 0.262 10.118 2.759
MACE Unscrubbed Coal 4
992. 674. 1666. 10.13 6.91 17.04 1.959 1.326
3.285 9.374 0.023 1.587 0.433
MACW Unscrubbed Coal 4
932. 687. 1619. 9.69 7.15 16.84 1.893 1.394
3.287 10.529 0.062 1.568 0.428
MACS Unscrubbed Coal 4
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Unscrubbed Coal 4
16701. 12637. 29339. 173.05 130.80 303.85 28.693 21.636
50.329 125.321 0.663 28.999 7.909
MANO Unscrubbed Coal 4
36396. 25999. 62395. 365.73 260.99 626.73 49.831 35.771
85.602 268.050 1.300 59.676 16.275
MAPP Unscrubbed Coal 4
33125. 24527. 57652. 351.46 260.21 611.66 71.884 53.754 1
25.639 266.597 1.362 58.397 15.926
UPNY Unscrubbed Coal 4
3843. 2151. 5994. 39.73 22.21 61.94 8.023 4.321
12.343 39.025 0.188 5.768 1.573
DSNY Unscrubbed Coal 4
3063. 2038. 5100. 31.73 21.11 52.84 5.923 3.941
9.864 26.855 0.087 4.921 1.342
NYC Unscrubbed Coal 4
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Unscrubbed Coal 4
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Unscrubbed Coal 4
491. 390. 880. 4.77 3.79 8.57 0.622 0.494
1.116 4.712 0.015 0.798 0.218
FRCC Unscrubbed Coal 4
1287. 1022. 2308. 13.20 10.48 23.68 2.348 1.865
4.213 11.841 0.035 2.205 0.601
VACA Unscrubbed Coal 4
13988. 9398. 23386. 143.02 96.41 239.43 26.971 18.350
45.321 129.880 0.435 22.296 6.081
TVA Unscrubbed Coal 4
12403. 9851. 22254. 127.60 101.35 228.95 23.902 18.983
42.885 116.969 0.263 21.320 5.815
SOU Unscrubbed Coal 4

14288. 13019. 27307. 140.67 130.09 270.76 25.327 23.457
48.784 144.342 0.431 25.214 6.877
ENTG Unscrubbed Coal 4
2283. 1813. 4095. 23.74 18.85 42.59 3.312 2.630
5.942 21.296 0.073 3.966 1.082
SPPN Unscrubbed Coal 4
7056. 5436. 12492. 75.84 58.32 134.16 18.343 14.130
32.473 55.112 0.242 12.619 3.442
SPPS Unscrubbed Coal 4
24942. 19810. 44752. 249.98 198.54 448.51 45.902 36.457
82.359 155.328 1.109 43.265 11.800
CALI Unscrubbed Coal 4
710. 564. 1273. 7.79 6.19 13.97 0.802 0.637
1.438 6.987 0.029 1.301 0.355
PNW Unscrubbed Coal 4
2212. 1757. 3969. 23.92 19.00 42.93 5.280 4.194
9.474 15.782 0.095 4.135 1.128
AZNM Unscrubbed Coal 4
1726. 1371. 3098. 17.84 14.17 32.00 3.766 2.991
6.757 12.432 0.033 2.980 0.813
RMPA Unscrubbed Coal 4
8167. 6487. 14654. 85.70 68.07 153.77 21.904 17.397
39.301 52.468 0.117 14.642 3.993
NWPE Unscrubbed Coal 4
7819. 6210. 14029. 80.57 63.99 144.57 17.408 13.826
31.234 57.684 0.214 13.624 3.716

Total Unscrubbed Coal 4
238669. 181232. 419901. 2442.12 1855.13 4297.25 447.925 341.348 7
89.273 1928.000 8.298 406.627 110.898

NOx
SO2 MER CO2 Carbon
Year: 2020, Plant Type: Oil/Gas Steam 5 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Oil/Gas Steam 5
1053. 570. 1623. 10.10 5.46 15.56 1.005 0.544
1.548 0.000 0.000 0.826 0.225
ECAO Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Oil/Gas Steam 5
0. 13709. 13709. 0.00 136.95 136.95 0.000 19.025
19.025 0.000 0.000 7.268 1.982
MACE Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Oil/Gas Steam 5
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
MACS    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Oil/Gas Steam                   5
       0.      1627.      1627.     0.00    15.52    15.52     0.000    1.063
 1.063       0.000       0.000         0.824         0.225
LILC    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Oil/Gas Steam                   5
       0.      6539.      6539.     0.00    65.38    65.38     0.000    8.740
 8.740       0.000       0.000         3.470         0.946
CALI    Oil/Gas Steam                   5
       0.      1865.      1865.     0.00    17.78    17.78     0.000    0.178
 0.178       0.000       0.000         0.944         0.257
PNW     Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Oil/Gas Steam                   5
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Oil/Gas Steam                 5
```

1053. 24309. 25363. 10.10 241.09 251.18 1.005 29.549
30.554 0.000 0.000 13.330 3.636

NOx
SO2 MER CO2 Carbon
Year: 2020, Plant Type: Oil/Gas Steam_Nox 6 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Oil/Gas Steam_Nox 6
0. 1641. 1641. 0.00 16.26 16.26 0.000 0.973
0.973 0.000 0.000 0.863 0.235
MACE Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Oil/Gas Steam_Nox 6
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Oil/Gas Steam_Nox 6

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Oil/Gas Steam_Nox              6
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Oil/Gas Steam_Nox              6
       0.      1641.      1641.     0.00    16.26    16.26     0.000    0.973
 0.973       0.000       0.000         0.863         0.235
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Nuclear                        7         (Emissions By R
egion)       Generation                    Trillion                Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Nuclear                        7
    4676.      4072.      8748.    60.17    52.40   112.57     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Nuclear                        7
   22213.     14649.     36862.   232.96   153.43   386.39     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
ERCT    Nuclear                         7
   22733.     17771.     40504.   237.70   185.63   423.33     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Nuclear                         7
   39910.     29505.     69414.   424.23   313.84   738.06     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Nuclear                         7
   14843.      9613.     24456.   157.92   102.46   260.39     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Nuclear                         7
    8324.      5461.     13785.    90.46    59.34   149.80     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Nuclear                         7
    6313.      4817.     11130.    66.97    51.32   118.29     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Nuclear                         7
   59461.     44454.    103915.   627.24   468.56  1095.80     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Nuclear                         7
   15053.     11826.     26879.   161.21   126.44   287.65     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Nuclear                         7
   12447.     11189.     23636.   130.54   117.38   247.92     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Nuclear                         7
    2750.      3380.      6131.    27.83    34.20    62.02     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Nuclear                         7
   20276.     14014.     34289.   204.84   141.55   346.39     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Nuclear                         7
   17603.     13703.     31306.   192.56   150.00   342.57     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Nuclear                         7
   68741.     53769.    122510.   703.15   550.51  1253.66     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Nuclear                         7
   32863.     25682.     58546.   341.61   266.75   608.36     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Nuclear                         7
   26939.     20761.     47700.   294.26   226.87   521.14     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Nuclear                         7
   24423.     18100.     42523.   270.96   200.93   471.89     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Nuclear                         7
    5668.      4084.      9752.    55.33    39.87    95.20     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Nuclear                         7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Nuclear                         7
   20241.     15089.     35329.   206.46   153.43   359.88     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Nuclear                         7
    5713.      3138.      8851.    57.49    31.58    89.07     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Nuclear                         7
   16759.     13773.     30532.   176.42   144.93   321.35     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
RMPA    Nuclear                        7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Nuclear                        7
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Nuclear                        7
  447949.    338850.    786799.  4720.33  3571.42  8291.75     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Hydro                          8         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Hydro                          8
     618.       395.      1013.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Hydro                          8
    1806.      1169.      2974.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Hydro                          8
     431.       365.       796.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Hydro                          8
    2346.      1770.      4115.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Hydro                          8
    1512.       632.      2144.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Hydro                          8
      43.        16.        59.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Hydro                          8
    1007.       676.      1683.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Hydro                          8
    1079.       747.      1826.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Hydro                          8
    5412.      4577.      9989.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Hydro                          8
   15534.     10355.     25889.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Hydro                          8
    1237.       824.      2061.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Hydro                          8
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Hydro                           8
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Hydro                           8
    3489.      1724.      5212.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Hydro                           8
      83.        38.       121.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Hydro                           8
    6437.      3139.      9575.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Hydro                           8
   11469.      6255.     17724.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Hydro                           8
    6138.      2706.      8844.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Hydro                           8
     646.       474.      1120.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Hydro                           8
     601.       418.      1020.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Hydro                           8
    4702.      3448.      8150.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Hydro                           8
   16750.     17655.     34405.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Hydro                           8
   63340.     47747.    111087.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Hydro                           8
    3484.      3538.      7022.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Hydro                           8
    3767.      3826.      7592.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Hydro                           8
    2460.      2498.      4958.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Hydro                          8
  154390.    114990.    269380.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Comb.Cycle Gas                 9         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)
```

		WINTER	SUMMER	Total	WINTER	SUMMER	Total	WINTER	SUMMER
		Total	Total	Total	Total		Total		
MECS	Comb.Cycle Gas				9				
		12549.	7690.	20240.	90.81	55.33	146.15	0.930	0.570
		1.500	0.000	0.000	7.756		2.115		
ECAO	Comb.Cycle Gas				9				
		19517.	9903.	29420.	146.66	74.49	221.15	1.615	0.859
		2.474	0.000	0.000	11.736		3.201		
ERCT	Comb.Cycle Gas				9				
		88769.	75392.	164161.	651.38	555.88	1207.26	6.566	5.765
		12.332	0.000	0.000	64.070		17.474		
MACE	Comb.Cycle Gas				9				
		9298.	9332.	18630.	72.25	73.28	145.53	1.432	1.536
		2.969	0.000	0.000	7.724		2.106		
MACW	Comb.Cycle Gas				9				
		8758.	4159.	12917.	65.69	31.19	96.88	0.657	0.312
		0.969	0.000	0.000	5.141		1.402		
MACS	Comb.Cycle Gas				9				
		3603.	2653.	6256.	25.76	19.04	44.79	0.316	0.246
		0.563	0.000	0.000	2.377		0.648		
WUMS	Comb.Cycle Gas				9				
		4810.	3033.	7843.	34.83	22.08	56.92	0.611	0.423
		1.034	0.000	0.000	3.021		0.824		
MANO	Comb.Cycle Gas				9				
		6730.	5173.	11903.	50.48	38.83	89.31	0.505	0.393
		0.898	0.000	0.000	4.740		1.293		
MAPP	Comb.Cycle Gas				9				
		3667.	2363.	6030.	28.06	18.31	46.36	0.465	0.322
		0.788	0.000	0.000	2.461		0.671		
UPNY	Comb.Cycle Gas				9				
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
		0.000	0.000	0.000	0.000		0.000		
DSNY	Comb.Cycle Gas				9				
		15856.	11816.	27672.	115.61	86.24	201.85	1.177	0.878
		2.056	0.000	0.000	10.712		2.922		
NYC	Comb.Cycle Gas				9				
		7215.	4473.	11689.	51.92	32.45	84.37	0.868	0.617
		1.484	0.000	0.000	4.477		1.221		
LILC	Comb.Cycle Gas				9				
		10323.	7478.	17801.	73.23	53.10	126.33	0.807	0.595
		1.402	0.000	0.000	6.704		1.828		
NENG	Comb.Cycle Gas				9				
		41932.	30558.	72490.	317.88	232.22	550.10	4.824	3.597
		8.420	0.000	0.000	29.194		7.962		
FRCC	Comb.Cycle Gas				9				
		59338.	49992.	109330.	443.41	376.26	819.68	8.717	7.828
		16.546	0.000	0.000	43.500		11.864		
VACA	Comb.Cycle Gas				9				
		26030.	17150.	43180.	190.52	125.71	316.23	2.983	2.095
		5.079	0.000	0.000	16.782		4.577		
TVA	Comb.Cycle Gas				9				
		10206.	6650.	16855.	76.54	49.87	126.41	0.765	0.499
		1.264	0.000	0.000	6.709		1.830		
SOU	Comb.Cycle Gas				9				
		84093.	63512.	147605.	615.53	465.50	1081.04	6.314	4.789
		11.102	0.000	0.000	57.371		15.647		
ENTG	Comb.Cycle Gas				9				
		32549.	30441.	62990.	244.12	228.46	472.58	2.441	2.313
		4.754	0.000	0.000	25.080		6.840		
SPPN	Comb.Cycle Gas				9				
		3815.	2223.	6037.	28.61	16.67	45.28	0.286	0.167
		0.453	0.000	0.000	2.403		0.655		
SPPS	Comb.Cycle Gas				9				
		31235.	28352.	59588.	236.06	214.77	450.82	3.265	3.141

```
 6.406       0.000       0.000        23.925         6.525
CALI    Comb.Cycle Gas                 9
   87471.     64493.    151964.   630.21   465.78  1095.99     6.348    4.661
11.009       0.000       0.000        58.165        15.863
PNW     Comb.Cycle Gas                 9
   32744.     24251.     56995.   240.96   178.72   419.67     3.594    2.696
 6.290       0.000       0.000        22.272         6.074
AZNM    Comb.Cycle Gas                 9
   57462.     42866.    100328.   424.36   317.51   741.86     4.939    3.877
 8.816       0.000       0.000        39.371        10.738
RMPA    Comb.Cycle Gas                 9
    5060.      3517.      8577.    38.42    26.71    65.13     0.596    0.414
 1.010       0.000       0.000         3.457         0.943
NWPE    Comb.Cycle Gas                 9
     885.       825.      1710.     6.64     6.19    12.82     0.066    0.062
 0.128       0.000       0.000         0.681         0.186

Total Comb.Cycle Gas                 9
  663917.    508295.   1172212.  4899.94  3764.59  8664.53    61.089   48.654  1
09.743       0.000       0.001       459.830       125.408
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: IGCC                          10         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    IGCC                           10
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    IGCC                           10
    1135.       877.      2013.     8.26     6.38    14.64     0.413    0.319
 0.732       0.000       0.003         1.364         0.372
ERCT    IGCC                           10
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    IGCC                           10
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    IGCC                           10
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    IGCC                           10
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    IGCC                           10
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    IGCC                           10
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    IGCC                           10
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    IGCC                          10
    1083.       837.      1921.     7.88     6.09    13.97     0.394    0.305
 0.699       0.000       0.003         1.301         0.355
VACA    IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    IGCC                          10
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    IGCC                          10
     433.       335.       768.     3.15     2.44     5.59     0.095    0.073
 0.168       0.000       0.001         0.520         0.142

Total IGCC                          10
    2652.      2050.      4702.    19.30    14.91    34.21     0.902    0.697
 1.598       0.000       0.006         3.185         0.869
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

```
                                                
```

5.047 0.000 0.000 5.746 1.567
ENTG Turbine 11
0. 288. 288. 0.00 3.15 3.15 0.000 0.127
0.127 0.000 0.000 0.167 0.046
SPPN Turbine 11
625. 2296. 2921. 5.35 25.08 30.43 0.267 1.261
1.529 0.000 0.000 1.615 0.440
SPPS Turbine 11
417. 2215. 2632. 3.89 20.40 24.29 0.181 1.006
1.187 0.000 0.000 1.289 0.352
CALI Turbine 11
167. 665. 832. 1.53 7.80 9.34 0.078 0.321
0.399 0.000 0.000 0.496 0.135
PNW Turbine 11
14. 2491. 2505. 0.13 26.77 26.90 0.008 1.199
1.208 0.000 0.000 1.428 0.389
AZNM Turbine 11
0. 301. 301. 0.00 3.31 3.31 0.000 0.136
0.136 0.000 0.000 0.176 0.048
RMPA Turbine 11
258. 224. 482. 2.82 2.45 5.27 0.117 0.102
0.218 0.000 0.000 0.280 0.076
NWPE Turbine 11
49. 251. 299. 0.44 2.73 3.17 0.028 0.116
0.144 0.000 0.000 0.168 0.046

Total Turbine 11
28537. 67431. 95969. 257.83 644.15 901.98 12.396 30.554
42.949 0.000 0.000 47.868 13.055

NOx
SO2 MER CO2 Carbon
Year: 2020, Plant Type: Biomass 12 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Biomass 12
698. 539. 1237. 6.44 4.97 11.41 0.064 0.050
0.114 0.456 0.003 0.000 0.000
ECAO Biomass 12
364. 281. 645. 3.36 2.59 5.95 0.034 0.026
0.060 0.238 0.002 0.000 0.000
ERCT Biomass 12
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Biomass 12
287. 209. 496. 2.35 1.71 4.07 0.024 0.017
0.041 0.163 0.001 0.000 0.000
MACW Biomass 12
74. 57. 131. 0.68 0.53 1.20 0.007 0.005
0.012 0.048 0.000 0.000 0.000
MACS Biomass 12

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000      0.000      0.000        0.000        0.000
WUMS    Biomass                      12
      52.        40.        92.     0.42     0.32     0.74     0.004    0.003
 0.007      0.030      0.000        0.000        0.000
MANO    Biomass                      12
       4.         3.         8.     0.03     0.03     0.06     0.000    0.000
 0.001      0.002      0.000        0.000        0.000
MAPP    Biomass                      12
     706.       546.      1252.     5.72     4.42    10.14     0.057    0.044
 0.101      0.405      0.003        0.000        0.000
UPNY    Biomass                      12
      78.        60.       138.     0.72     0.56     1.28     0.007    0.006
 0.013      0.051      0.000        0.000        0.000
DSNY    Biomass                      12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000      0.000      0.000        0.000        0.000
NYC     Biomass                      12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000      0.000      0.000        0.000        0.000
LILC    Biomass                      12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000      0.000      0.000        0.000        0.000
NENG    Biomass                      12
    1033.       246.      1279.     9.20     2.17    11.37     0.092    0.022
 0.114      0.455      0.003        0.000        0.000
FRCC    Biomass                      12
     234.       181.       415.     2.16     1.67     3.83     0.022    0.017
 0.038      0.153      0.001        0.000        0.000
VACA    Biomass                      12
     204.       157.       361.     1.88     1.45     3.33     0.019    0.015
 0.033      0.133      0.001        0.000        0.000
TVA     Biomass                      12
       4.         3.         8.     0.04     0.03     0.07     0.000    0.000
 0.001      0.003      0.000        0.000        0.000
SOU     Biomass                      12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000      0.000      0.000        0.000        0.000
ENTG    Biomass                      12
      43.        33.        77.     0.40     0.31     0.71     0.004    0.003
 0.007      0.028      0.000        0.000        0.000
SPPN    Biomass                      12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000      0.000      0.000        0.000        0.000
SPPS    Biomass                      12
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000      0.000      0.000        0.000        0.000
CALI    Biomass                      12
    1872.      1447.      3319.    17.09    13.21    30.30     0.171    0.132
 0.303      1.212      0.009        0.000        0.000
PNW     Biomass                      12
      26.        20.        46.     0.21     0.16     0.37     0.002    0.002
 0.004      0.015      0.000        0.000        0.000
AZNM    Biomass                      12
     273.       201.       475.     2.23     1.64     3.87     0.022    0.016
 0.039      0.155      0.001        0.000        0.000
RMPA    Biomass                      12
       4.         3.         8.     0.03     0.03     0.06     0.000    0.000
 0.001      0.002      0.000        0.000        0.000
NWPE    Biomass                      12
      22.        17.        38.     0.17     0.13     0.31     0.002    0.001
 0.003      0.012      0.000        0.000        0.000

Total Biomass                        12
    5979.      4046.     10025.    53.13    35.93    89.07     0.531    0.359
```

0.891 3.563 0.025 0.000 0.000

NOx

SO2 MER CO2 Carbon

Year: 2020, Plant Type: Geothermal 13 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Geothermal 13
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
VACA    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Geothermal                    13
   11344.      8966.     20310.   291.69   230.53   522.21     0.000    0.000
 0.000       0.000       0.775         0.000         0.000
PNW     Geothermal                    13
      34.        27.        61.     1.10     0.87     1.97     0.000    0.000
 0.000       0.000       0.004         0.000         0.000
AZNM    Geothermal                    13
    1368.       996.      2363.    44.29    32.24    76.53     0.000    0.000
 0.000       0.000       0.141         0.000         0.000
RMPA    Geothermal                    13
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Geothermal                    13
    1026.       811.      1837.    32.60    25.77    58.37     0.000    0.000
 0.000       0.000       0.106         0.000         0.000

Total Geothermal                      13
   13772.     10799.     24571.   369.68   289.40   659.08     0.000    0.000
 0.000       0.000       1.027         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Landfill Gas                 14         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Landfill Gas                  14
      22.        17.        39.     0.31     0.23     0.54     0.038    0.029
 0.066       0.000       0.000         0.000         0.000
ECAO    Landfill Gas                  14
      54.        41.        95.     0.73     0.56     1.29     0.090    0.069
 0.159       0.000       0.000         0.000         0.000
ERCT    Landfill Gas                  14
```

696. 514. 1210. 8.05 5.98 14.03 0.990 0.735
1.725 0.000 0.000 0.000 0.000
MACE Landfill Gas 14
650. 473. 1123. 6.77 4.94 11.72 0.833 0.608
1.441 0.000 0.000 0.000 0.000
MACW Landfill Gas 14
4. 3. 8. 0.06 0.05 0.11 0.008 0.006
0.013 0.000 0.000 0.000 0.000
MACS Landfill Gas 14
18. 14. 32. 0.24 0.19 0.43 0.030 0.023
0.053 0.000 0.000 0.000 0.000
WUMS Landfill Gas 14
194. 143. 337. 2.17 1.60 3.77 0.267 0.197
0.464 0.000 0.000 0.000 0.000
MANO Landfill Gas 14
170. 130. 300. 2.32 1.77 4.09 0.285 0.218
0.503 0.000 0.000 0.000 0.000
MAPP Landfill Gas 14
49. 38. 87. 0.67 0.51 1.18 0.083 0.063
0.146 0.000 0.000 0.000 0.000
UPNY Landfill Gas 14
27. 20. 47. 0.37 0.28 0.65 0.045 0.034
0.079 0.000 0.000 0.000 0.000
DSNY Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Landfill Gas 14
1155. 837. 1992. 11.85 8.59 20.44 1.457 1.057
2.514 0.000 0.000 0.000 0.000
FRCC Landfill Gas 14
9. 7. 16. 0.12 0.09 0.22 0.015 0.011
0.026 0.000 0.000 0.000 0.000
VACA Landfill Gas 14
112. 85. 197. 1.53 1.16 2.69 0.188 0.143
0.331 0.000 0.000 0.000 0.000
TVA Landfill Gas 14
9. 7. 16. 0.12 0.09 0.22 0.015 0.011
0.026 0.000 0.000 0.000 0.000
SOU Landfill Gas 14
40. 31. 71. 0.55 0.42 0.97 0.068 0.052
0.119 0.000 0.000 0.000 0.000
ENTG Landfill Gas 14
27. 20. 47. 0.37 0.28 0.65 0.045 0.034
0.079 0.000 0.000 0.000 0.000
SPPN Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Landfill Gas 14
40. 31. 71. 0.55 0.42 0.97 0.068 0.052
0.119 0.000 0.000 0.000 0.000
CALI Landfill Gas 14
966. 737. 1703. 12.24 9.34 21.58 1.506 1.148
2.654 0.000 0.000 0.000 0.000
PNW Landfill Gas 14
94. 72. 166. 1.28 0.98 2.26 0.158 0.120
0.278 0.000 0.000 0.000 0.000
AZNM Landfill Gas 14
74. 56. 130. 0.92 0.69 1.62 0.113 0.085
0.199 0.000 0.000 0.000 0.000

RMPA Landfill Gas 14
4. 3. 8. 0.06 0.05 0.11 0.008 0.006
0.013 0.000 0.000 0.000 0.000
NWPE Landfill Gas 14
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Landfill Gas 14
4415. 3278. 7694. 51.28 38.22 89.50 6.308 4.701
11.009 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2020, Plant Type: Wind 15 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Wind 15
2. 1. 2. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Wind 15
164. 92. 256. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Wind 15
1852. 1022. 2874. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Wind 15
238. 123. 361. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Wind 15
17. 10. 27. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Wind 15
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Wind 15
20. 11. 32. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Wind 15
88. 49. 137. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Wind 15
1498. 837. 2336. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Wind 15
87. 49. 136. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Wind 15
29. 16. 45. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Wind 15
27. 15. 41. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
LILC    Wind                           15
      16.         9.        25.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Wind                           15
    1470.       755.      2225.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Wind                           15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Wind                           15
      20.        11.        31.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Wind                           15
       2.         1.         3.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Wind                           15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Wind                           15
      57.        32.        88.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Wind                           15
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Wind                           15
      66.        37.       102.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Wind                           15
    4635.      2599.      7234.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Wind                           15
     185.       104.       290.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Wind                           15
     603.       314.       917.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Wind                           15
     648.       363.      1011.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Wind                           15
      62.        35.        97.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Wind                            15
   11786.      6486.     18272.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Fuel Cell                    16         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
```

	Total	Total	Total	Total	Total					
MECS	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
ECAO	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
ERCT	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MACE	Fuel Cell			16						
	31.	23.	54.	0.23	0.17	0.40	0.046	0.034	0.080	0.000
MACW	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MACS	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
WUMS	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MANO	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
MAPP	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
UPNY	Fuel Cell			16						
	5.	3.	8.	0.03	0.03	0.06	0.007	0.005	0.012	0.000
DSNY	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
NYC	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
LILC	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
NENG	Fuel Cell			16						
	3.	2.	5.	0.03	0.01	0.04	0.005	0.002	0.007	0.000
FRCC	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
VACA	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
TVA	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
SOU	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
ENTG	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
SPPN	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000
SPPS	Fuel Cell			16						
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000

```
CALI    Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Fuel Cell                       16
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Fuel Cell                       16
      39.        28.        67.     0.29     0.21     0.50     0.058    0.042
 0.100       0.000       0.000         0.026         0.007
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------
```

```
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Solar                          17         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Solar                         17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
UPNY    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Solar                          17
     516.       274.       790.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Solar                          17
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Solar                          17
      21.        15.        36.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Solar                          17
       5.         3.         7.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Solar                          17
      38.        20.        59.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Solar                          17
     580.       312.       892.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
```

NOx

```
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Non Fossil_Other              18         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Non Fossil_Other              18
     145.       115.       260.     1.60     1.26     2.86     0.000    0.000
 0.000       0.000       0.046         0.000         0.000
ECAO    Non Fossil_Other              18
     397.       313.       710.     4.36     3.44     7.81     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Non Fossil_Other              18
      44.        35.        79.     0.48     0.38     0.87     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Non Fossil_Other              18
    1133.       893.      2026.    12.46     9.83    22.29     0.000    0.000
 0.000       0.000       0.791         0.000         0.000
MACW    Non Fossil_Other              18
     525.       414.       938.     5.77     4.55    10.32     0.000    0.000
 0.000       0.000       0.336         0.000         0.000
MACS    Non Fossil_Other              18
     242.       191.       434.     2.67     2.10     4.77     0.000    0.000
 0.000       0.000       0.169         0.000         0.000
WUMS    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Non Fossil_Other              18
      93.        73.       166.     1.02     0.80     1.82     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Non Fossil_Other              18
     150.       118.       268.     1.65     1.30     2.95     0.000    0.000
 0.000       0.000       0.105         0.000         0.000
UPNY    Non Fossil_Other              18
     150.       118.       268.     1.65     1.30     2.95     0.000    0.000
 0.000       0.000       0.105         0.000         0.000
DSNY    Non Fossil_Other              18
     361.       285.       646.     3.98     3.14     7.11     0.000    0.000
 0.000       0.000       0.252         0.000         0.000
NYC     Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Non Fossil_Other              18
     604.       476.      1080.     6.64     5.24    11.88     0.000    0.000
 0.000       0.000       0.355         0.000         0.000
NENG    Non Fossil_Other              18
    2367.      1867.      4234.    26.04    20.53    46.57     0.000    0.000
 0.000       0.000       1.647         0.000         0.000
FRCC    Non Fossil_Other              18
    1869.      1474.      3343.    20.56    16.21    36.77     0.000    0.000
 0.000       0.000       1.120         0.000         0.000
VACA    Non Fossil_Other              18
     617.       487.      1104.     6.79     5.35    12.14     0.000    0.000
 0.000       0.000       0.431         0.000         0.000
TVA     Non Fossil_Other              18
      53.        42.        95.     0.58     0.46     1.04     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
ENTG    Non Fossil_Other              18
     137.       108.       244.     1.50     1.19     2.69     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Non Fossil_Other              18
     101.        80.       181.     0.48     0.38     0.87     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Non Fossil_Other              18
     785.       619.      1403.     9.00     7.10    16.10     0.000    0.000
 0.000       0.000       0.225         0.000         0.000
PNW     Non Fossil_Other              18
     256.       202.       457.     2.81     2.22     5.03     0.000    0.000
 0.000       0.000       0.102         0.000         0.000
AZNM    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Non Fossil_Other              18
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Non Fossil_Other              18
   10028.      7909.     17936.   110.04    86.79   196.83     0.000    0.000
 0.000       0.000       5.684         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Fossil_Other                 19         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Fossil_Other                  19
     268.       205.       473.     2.95     2.25     5.20     0.614    0.468
 1.082       0.000       0.000         0.000         0.000
ERCT    Fossil_Other                  19
       9.         7.        16.     0.10     0.08     0.17     0.020    0.016
 0.036       0.000       0.000         0.000         0.000
MACE    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Fossil_Other                  19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
WUMS    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Fossil_Other                   19
       9.         7.        16.     0.10     0.08     0.17     0.020    0.016
 0.036       0.000       0.000         0.000         0.000
MAPP    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Fossil_Other                   19
      89.        68.       158.     0.98     0.75     1.73     0.064    0.049
 0.114       0.000       0.000         0.000         0.000
PNW     Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Fossil_Other                   19
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Fossil_Other                   19
     183.       140.       323.     2.02     1.54     3.56     0.706    0.538
 1.244       0.012       0.018         0.000         0.000

Total Fossil_Other                   19
     559.       426.       985.     6.15     4.69    10.84     1.425    1.087
 2.512       0.012       0.018         0.000         0.000
```


NOx
SO2 MER CO2 Carbon
Year: 2020, Plant Type: Pump Storage 20 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Pump Storage 20
1066. 839. 1905. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Pump Storage 20
152. 110. 262. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Pump Storage 20
264. 199. 463. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Pump Storage 20
81. 175. 256. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Pump Storage 20
197. 142. 339. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Pump Storage 20
0. 155. 155. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Pump Storage 20
569. 446. 1015. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Pump Storage 20
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
VACA    Pump Storage                  20
     687.      1410.      2097.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Pump Storage                  20
     541.       687.      1228.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Pump Storage                  20
       0.       604.       604.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Pump Storage                  20
      32.        37.        69.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Pump Storage                  20
       0.        43.        43.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Pump Storage                  20
       0.       428.       428.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Pump Storage                  20
      38.        46.        84.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Pump Storage                  20
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Pump Storage                  20
    3628.      5322.      8950.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Int. Imports                 21         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                            (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Int. Imports                  21
       1.         1.         2.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
MACE    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Int. Imports                  21
       1.         1.         2.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Int. Imports                  21
     702.       507.      1209.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Int. Imports                  21
    4671.      3371.      8042.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Int. Imports                  21
    7785.      5618.     13403.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Int. Imports                  21
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Int. Imports                  21
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Int. Imports                  21
   13160.      9497.     22657.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Cgn_Coal                      22         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Cgn_Coal                      22
     223.       180.       402.     2.31     1.87     4.18     0.468    0.377
 0.845       2.091       0.007         0.389         0.106
ECAO    Cgn_Coal                      22
     577.       466.      1043.     5.19     4.18     9.37     1.182    0.954
 2.135       3.905       0.016         0.873         0.238
ERCT    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Cgn_Coal                      22
      32.        26.        59.     0.29     0.23     0.52     0.058    0.047
 0.104       0.286       0.001         0.048         0.013
MACW    Cgn_Coal                      22
    1583.      1201.      2785.    13.93    10.41    24.34     2.595    1.928
 4.523      11.928       0.051         2.267         0.618
MACS    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Cgn_Coal                      22
      61.        49.       110.     0.51     0.41     0.92     0.094    0.076
 0.171       0.459       0.003         0.089         0.024
MANO    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Cgn_Coal                      22
     312.       252.       563.     2.79     2.25     5.03     0.706    0.570
 1.276       1.283       0.009         0.469         0.128
UPNY    Cgn_Coal                      22
     704.       568.      1273.     5.84     4.71    10.55     0.922    0.744
 1.666       3.166       0.017         0.983         0.268
DSNY    Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Cgn_Coal                      22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
LILC    Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Cgn_Coal                        22
     308.       248.       556.     2.63     2.12     4.75     0.566    0.456
 1.022       2.614       0.012         0.443         0.121
FRCC    Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Cgn_Coal                        22
    3882.      3133.      7015.    33.49    27.02    60.51     6.222    5.022
11.244      29.672       0.111         5.635         1.537
TVA     Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Cgn_Coal                        22
       4.         3.         7.     0.04     0.03     0.07     0.007    0.006
 0.013       0.036       0.000         0.006         0.002
ENTG    Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Cgn_Coal                        22
    1243.      1003.      2246.    10.63     8.57    19.20     2.067    1.668
 3.734       9.600       0.033         1.788         0.488
CALI    Cgn_Coal                        22
    1356.      1094.      2450.    12.37     9.98    22.36     0.557    0.449
 1.006      10.319       0.041         2.082         0.568
PNW     Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Cgn_Coal                        22
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Cgn_Coal                        22
     223.       180.       402.     1.81     1.46     3.28     0.325    0.263
 0.588       1.638       0.007         0.316         0.086

Total Cgn_Coal                      22
   10508.      8403.     18911.    91.81    73.27   165.08    15.769   12.559
28.328      76.997       0.310        15.387         4.196
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Cgn_Gas                        23         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
               (GWh)                            (Btu)                  (1000 Tons)
          (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

```
MECS    Cgn_Gas                         23
    5462.      3556.      9018.    40.99    27.06    68.05     2.979    1.891
 4.870       0.000       0.000         3.612         0.985
ECAO    Cgn_Gas                         23
    1779.       865.      2643.    13.57     6.65    20.22     0.160    0.084
 0.244       0.000       0.000         1.073         0.293
ERCT    Cgn_Gas                         23
    7103.     11392.     18495.    53.03    86.73   139.75     1.200    2.109
 3.309       0.000       0.000         7.417         2.023
MACE    Cgn_Gas                         23
    7060.      5552.     12612.    53.71    42.76    96.47     2.227    1.778
 4.005       0.000       0.000         5.120         1.396
MACW    Cgn_Gas                         23
      72.       189.       261.     0.67     1.81     2.49     0.060    0.149
 0.209       0.000       0.000         0.132         0.036
MACS    Cgn_Gas                         23
      62.       143.       205.     0.61     1.40     2.01     0.024    0.056
 0.081       0.000       0.000         0.107         0.029
WUMS    Cgn_Gas                         23
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Cgn_Gas                         23
      97.        77.       175.     0.74     0.59     1.33     0.008    0.008
 0.016       0.000       0.000         0.071         0.019
MAPP    Cgn_Gas                         23
       7.        16.        23.     0.08     0.17     0.25     0.003    0.007
 0.011       0.000       0.000         0.013         0.004
UPNY    Cgn_Gas                         23
    6249.      4188.     10437.    51.21    33.86    85.07     4.652    3.093
 7.744       0.000       0.000         4.514         1.231
DSNY    Cgn_Gas                         23
     351.       269.       620.     3.30     2.53     5.84     0.309    0.237
 0.546       0.000       0.000         0.310         0.084
NYC     Cgn_Gas                         23
      41.        95.       137.     0.38     0.86     1.24     0.035    0.081
 0.115       0.000       0.000         0.066         0.018
LILC    Cgn_Gas                         23
     256.       196.       453.     2.07     1.58     3.65     0.190    0.145
 0.335       0.000       0.000         0.194         0.053
NENG    Cgn_Gas                         23
    1077.       788.      1865.     9.08     6.68    15.76     0.519    0.379
 0.898       0.000       0.000         0.836         0.228
FRCC    Cgn_Gas                         23
     491.      1506.      1997.     4.39    13.56    17.96     0.289    0.935
 1.223       0.000       0.000         0.953         0.260
VACA    Cgn_Gas                         23
    4657.      2494.      7151.    34.51    18.96    53.47     0.805    0.546
 1.351       0.000       0.000         2.838         0.774
TVA     Cgn_Gas                         23
    4336.      4086.      8423.    32.52    30.83    63.35     0.325    0.326
 0.651       0.000       0.000         3.362         0.917
SOU     Cgn_Gas                         23
    6488.      5007.     11494.    49.57    38.32    87.89     0.809    0.629
 1.439       0.000       0.000         4.664         1.272
ENTG    Cgn_Gas                         23
    9586.      5086.     14672.    71.70    37.56   109.26     0.750    0.616
 1.366       0.000       0.000         5.798         1.581
SPPN    Cgn_Gas                         23
       0.         8.         8.     0.00     0.08     0.08     0.000    0.003
 0.003       0.000       0.000         0.005         0.001
SPPS    Cgn_Gas                         23
    3855.      3697.      7552.    29.15    29.01    58.17     0.345    0.553
 0.899       0.000       0.000         3.087         0.842
CALI    Cgn_Gas                         23
```

```
   23505.     10795.     34300.   200.07    87.89   287.96     3.888    1.524
 5.412       0.000       0.000        15.282         4.168
PNW     Cgn_Gas                        23
    5024.      3854.      8878.    39.24    30.10    69.33     1.126    0.864
 1.989       0.000       0.000         3.680         1.004
AZNM    Cgn_Gas                        23
    4484.      3543.      8027.    34.66    27.65    62.31     0.875    0.747
 1.622       0.000       0.000         3.307         0.902
RMPA    Cgn_Gas                        23
     821.       210.      1030.     7.09     1.82     8.91     0.406    0.104
 0.510       0.000       0.000         0.473         0.129
NWPE    Cgn_Gas                        23
      45.        34.        79.     0.29     0.22     0.51     0.021    0.016
 0.037       0.000       0.000         0.027         0.007

Total Cgn_Gas                        23
   92909.     67647.    160555.   732.61   528.71  1261.32    22.005   16.882
38.887       0.000       0.000        66.939        18.256
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Cgn_Oil                        24         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Cgn_Oil                        24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
UPNY    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Cgn_Oil                         24
       0.        29.        29.     0.00     0.25     0.25     0.000    0.037
 0.037       0.000       0.000         0.013         0.004
VACA    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Cgn_Oil                         24
    1741.      1124.      2864.    13.16     8.50    21.66     0.099    0.064
 0.162       0.000       0.000         1.150         0.314
PNW     Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Cgn_Oil                         24
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Cgn_Oil                       24
    1741.      1153.      2894.    13.16     8.75    21.92     0.099    0.100
 0.199       0.000       0.000         1.163         0.317
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
              SO2         MER           CO2          Carbon
```

Year: 2020, Plant Type: Cgn_Other 25 (Emissions By Region)

		Generation			Trillion			Emission			Emission			Emission			Emission		
		(GWh)			(Btu)			(1000 Tons)			(1000 Tons)			(Tons)			(Mil Tonnes)		
		WINTER Total	SUMMER Total	Total	WINTER Total	SUMMER Total	Total	WINTER Total	SUMMER Total	Total	WINTER Total	SUMMER Total	Total	WINTER Total	SUMMER Total	Total	WINTER Total	SUMMER Total	Total
MECS	Cgn_Other	316.	244.	561.	1.68	1.30	2.98	0.007	0.005	0.012	0.050	0.062	0.000	0.000	0.000	25			
ECAO	Cgn_Other	26.	20.	46.	0.22	0.17	0.39	0.002	0.002	0.004	0.016	0.000	0.000	0.000	0.000	25			
ERCT	Cgn_Other	113.	252.	365.	0.68	1.50	2.18	0.134	0.307	0.441	0.000	0.022	0.000	0.000	0.000	25			
MACE	Cgn_Other	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	25			
MACW	Cgn_Other	156.	121.	277.	0.83	0.64	1.48	0.004	0.003	0.007	0.027	0.007	0.000	0.000	0.000	25			
MACS	Cgn_Other	234.	181.	415.	0.98	0.76	1.74	0.000	0.000	0.000	0.000	0.062	0.000	0.000	0.000	25			
WUMS	Cgn_Other	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	25			
MANO	Cgn_Other	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	25			
MAPP	Cgn_Other	9.	7.	15.	0.04	0.03	0.06	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	25			
UPNY	Cgn_Other	191.	147.	338.	2.55	1.97	4.52	0.000	0.000	0.000	0.000	0.160	0.000	0.000	0.000	25			
DSNY	Cgn_Other	30.	23.	54.	0.13	0.10	0.23	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	25			
NYC	Cgn_Other	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	25			
LILC	Cgn_Other	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	25			
NENG	Cgn_Other	429.	199.	628.	2.85	1.07	3.92	0.027	0.009	0.036	0.144	0.010	0.000	0.000	0.000	25			
FRCC	Cgn_Other	360.	278.	638.	2.99	2.31	5.30	0.023	0.017	0.040	0.160	0.001	0.000	0.000	0.000	25			
VACA	Cgn_Other	191.	147.	338.	1.44	1.11	2.55	0.013	0.010	0.022	0.089	0.012	0.000	0.000	0.000	25			
TVA	Cgn_Other	0.	0.	0.	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	25			
SOU	Cgn_Other	22.	17.	38.	0.19	0.14	0.33	0.002	0.001	0.003	0.013	0.000	0.000	0.000	0.000	25			
ENTG	Cgn_Other															25			

```
     795.       607.      1402.     4.81     3.67     8.49     0.942    0.719
 1.661       0.021       0.083         0.000         0.000
SPPN    Cgn_Other                      25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Cgn_Other                      25
     156.       121.       277.     0.66     0.51     1.17     0.001    0.001
 0.001       0.005       0.000         0.000         0.000
CALI    Cgn_Other                      25
     576.       444.      1020.     4.10     3.16     7.26     0.078    0.060
 0.139       0.210       0.016         0.000         0.000
PNW     Cgn_Other                      25
     416.       321.       738.     3.55     2.75     6.30     0.036    0.027
 0.063       0.252       0.002         0.000         0.000
AZNM    Cgn_Other                      25
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Cgn_Other                      25
      30.        23.        54.     0.24     0.19     0.43     0.002    0.002
 0.004       0.017       0.000         0.000         0.000
NWPE    Cgn_Other                      25
      43.        33.        77.     0.18     0.14     0.32     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Cgn_Other                     25
    4093.      3186.      7279.    28.13    21.53    49.66     1.271    1.164
 2.434       1.004       0.447         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: NonCG IPP_Coal                26         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    NonCG IPP_Coal                 26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
WUMS    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NonCG IPP_Coal                26
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: NonCG IPP_Gas                 27         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    NonCG IPP_Gas                 27
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    NonCG IPP_Gas                  27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NonCG IPP_Gas                 27
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: NonCG IPP_Other              28         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MACE    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
NWPE    NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total NonCG IPP_Other                28
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Blr_Coal                      29         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Coal                     29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Coal                     29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Coal                     29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Coal                     29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Coal                     29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Coal                     29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Coal                     29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Blr_Coal                     29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Blr_Coal                     29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Blr_Coal                     29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Blr_Coal                     29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Blr_Coal                     29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Blr_Coal                     29
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Coal                      29
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Blr_Gas                      30         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
               (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total
```

```
MECS    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
ECAO    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
ERCT    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
MACE    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
MACW    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
MACS    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
WUMS    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
MANO    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
MAPP    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
UPNY    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
DSNY    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
NYC     Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
LILC    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
NENG    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
FRCC    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
VACA    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
TVA     Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
SOU     Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
ENTG    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
SPPN    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
SPPS    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
CALI    Blr_Gas                         30
       0.         0.         0.      0.00      0.00      0.00      0.000     0.000
```

```
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Gas                        30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Gas                        30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Gas                        30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Gas                        30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Gas                         30
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Blr_Oil                        31         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Blr_Oil                        31
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Blr_Oil                        31
```

```
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Oil                        31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Oil                         31
       0.         0.         0.      0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Blr_Other                     32         (Emissions By R
```

```
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Blr_Other                     32
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
SPPN    Blr_Other                     32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Blr_Other                     32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Blr_Other                     32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Blr_Other                     32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Blr_Other                     32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Blr_Other                     32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Blr_Other                     32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Blr_Other                     32
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: SteamOnly Cogen              33         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    SteamOnly Cogen               33
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    SteamOnly Cogen               33
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total SteamOnly Cogen                33
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
```

```
-------------------------------------------------------

-------------------------------------------------------------------------------------
-------------------------------------------------------------------------------------
-------------------------------------------------------

                                                                                  NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Rep.Coal-CC                  34         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Rep.Coal-CC                   34
     955.       732.      1687.     6.89     5.29    12.18     0.069    0.053
 0.122       0.000       0.000         0.646         0.176
FRCC    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Rep.Coal-CC                   34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
TVA     Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Rep.Coal-CC                    34
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Rep.Coal-CC                   34
     955.       732.      1687.     6.89     5.29    12.18     0.069    0.053
 0.122       0.000       0.000         0.646         0.176
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Rep.O/G-CC                    35         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Rep.O/G-CC                     35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Rep.O/G-CC                     35
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Rep.O/G-CC                    35
    1441.      1105.      2547.    10.41     7.98    18.39     0.104    0.080
 0.184       0.000       0.000         0.976         0.266
NENG    Rep.O/G-CC                    35
      78.        60.       138.     0.56     0.43     0.99     0.006    0.004
 0.010       0.000       0.000         0.053         0.014
FRCC    Rep.O/G-CC                    35
   14316.     10981.     25297.   103.36    79.28   182.64     1.034    0.793
 1.826       0.000       0.000         9.693         2.644
VACA    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Rep.O/G-CC                    35
   18946.     14532.     33478.   136.79   104.92   241.71     1.368    1.049
 2.417       0.000       0.000        12.828         3.498
PNW     Rep.O/G-CC                    35
     421.       323.       744.     3.04     2.33     5.37     0.030    0.023
 0.054       0.000       0.000         0.285         0.078
AZNM    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
NWPE    Rep.O/G-CC                    35
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Rep.O/G-CC                    35
   35202.     27002.     62204.   254.16   194.95   449.11     2.542    1.950
 4.491       0.000       0.000        23.834         6.500
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
```

```
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Rep.Coal-IGCC                36         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                        (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
NENG    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Rep.Coal-IGCC                  36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Rep.Coal-IGCC                 36
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.Scrubber                 37         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.Scrubber                 37
```

7695. 6112. 13807. 75.88 60.27 136.15 11.876 9.432
21.308 4.085 0.117 12.679 3.458
ECAO Ret.Scrubber 37
2194. 1743. 3937. 21.60 17.16 38.76 4.332 3.440
7.772 2.326 0.006 3.610 0.984
ERCT Ret.Scrubber 37
6392. 6311. 12703. 67.56 66.89 134.45 10.231 10.107
20.338 17.910 0.497 13.033 3.554
MACE Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.Scrubber 37
1304. 1036. 2340. 12.43 9.87 22.30 2.343 1.861
4.203 0.981 0.006 2.077 0.566
MACS Ret.Scrubber 37
1544. 1226. 2770. 16.09 12.78 28.87 4.070 3.233
7.303 0.866 0.005 2.688 0.733
WUMS Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.Scrubber 37
3145. 2498. 5642. 31.81 25.27 57.08 4.484 3.561
8.045 4.514 0.070 5.315 1.450
MAPP Ret.Scrubber 37
6176. 4905. 11081. 70.44 55.95 126.39 25.997 20.647
46.643 7.331 0.356 12.349 3.368
UPNY Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.Scrubber 37
417. 332. 749. 4.11 3.26 7.37 0.485 0.385
0.870 0.162 0.006 0.686 0.187
FRCC Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.Scrubber 37
541. 429. 970. 5.53 4.39 9.93 0.996 0.791
1.787 0.298 0.009 0.924 0.252
ENTG Ret.Scrubber 37
11916. 9464. 21380. 124.14 98.59 222.73 19.428 15.430
34.858 16.705 0.361 20.741 5.657
SPPN Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.Scrubber 37
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
PNW     Ret.Scrubber                    37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Scrubber                    37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Scrubber                    37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Scrubber                    37
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Scrubber                   37
   41324.     34055.     75379.   429.60   354.43   784.03    84.240   68.887  1
53.127      55.177       1.434        74.102        20.210
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistSCR & Scrub          38         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSCR & Scrub          38
   51462.     40873.     92335.   493.47   391.93   885.40    13.433   10.669
24.102      82.352       0.439        82.451        22.487
ERCT    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSCR & Scrub          38
     813.       645.      1458.     8.63     6.85    15.48     0.211    0.168
 0.379       0.681       0.014         1.442         0.393
MACW    Ret.ExistSCR & Scrub          38
   11129.      8839.     19967.   104.72    83.17   187.90     2.560    2.033
 4.593      17.798       0.170        17.498         4.772
MACS    Ret.ExistSCR & Scrub          38
    6562.      5212.     11773.    65.99    52.41   118.40     1.512    1.201
 2.712       8.467       0.068        11.026         3.007
WUMS    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSCR & Scrub          38
    2251.      1788.      4039.    23.53    18.69    42.22     0.859    0.682
 1.541       5.277       0.017         3.931         1.072
MAPP    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSCR & Scrub          38
    1759.      1397.      3157.    17.34    13.77    31.11     0.858    0.682
 1.540       1.369       0.029         2.897         0.790
FRCC    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSCR & Scrub          38
   28120.     22334.     50454.   270.27   214.65   484.92     5.779    4.590
10.368      32.435       0.281        45.157        12.316
TVA     Ret.ExistSCR & Scrub          38
   14318.     11372.     25690.   139.63   110.89   250.52     3.392    2.694
 6.085      17.928       0.082        23.329         6.362
SOU     Ret.ExistSCR & Scrub          38
   25150.     19975.     45125.   243.75   193.59   437.34     5.218    4.144
 9.362      33.724       0.223        40.726        11.107
ENTG    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR & Scrub          38
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR & Scrub          38
  141564.    112433.    253998.  1367.33  1085.96  2453.29    33.821   26.861
60.683     200.031       1.321       228.457        62.306
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistSNCR & Scrub         39         (Emissions By R
egion)       Generation                    Trillion                   Emission
```

```
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR & Scrub         39
   12120.      9626.     21746.   116.77    92.74   209.51    16.753   13.305
30.058      20.641       0.308        19.510         5.321
ERCT    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSNCR & Scrub         39
      69.        55.       124.     0.69     0.55     1.24     0.076    0.060
 0.136       0.075       0.002         0.116         0.032
TVA     Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
SPPN    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR & Scrub         39
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR & Scrub         39
   12189.      9681.     21870.   117.46    93.29   210.75    16.829   13.366
30.195      20.716       0.310        19.626         5.353
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.SCR                        40         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
               (GWh)                              (Btu)                   (1000 Tons)
          (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SCR                       40
    5806.      4611.     10417.    54.26    43.10    97.36     1.448    1.150
 2.598      48.679       0.128         9.066         2.473
ECAO    Ret.SCR                       40
    8969.      7067.     16035.    83.70    65.85   149.55     2.522    1.988
 4.510      75.666       0.261        13.927         3.798
ERCT    Ret.SCR                       40
       0.      3940.      3940.     0.00    39.86    39.86     0.000    1.003
 1.003      19.928       0.035         3.845         1.049
MACE    Ret.SCR                       40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.SCR                       40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.SCR                       40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.SCR                       40
    2986.      2372.      5358.    30.58    24.29    54.87     0.765    0.607
```

```
 1.372      23.062       0.172         5.294         1.444
MANO    Ret.SCR                        40
    1258.       999.      2256.    11.72     9.31    21.03     0.293    0.233
 0.526       7.983       0.046         2.029         0.553
MAPP    Ret.SCR                        40
   12716.      9749.     22465.   130.33    99.87   230.20     3.566    2.732
 6.297      99.885       0.529        21.973         5.993
UPNY    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.SCR                        40
    3887.      3121.      7008.    37.91    30.44    68.35     0.948    0.761
 1.709      34.177       0.108         6.365         1.736
VACA    Ret.SCR                        40
    1955.      1464.      3419.    19.86    14.85    34.72     0.536    0.397
 0.933      19.093       0.057         3.233         0.882
TVA     Ret.SCR                        40
    2341.      1859.      4200.    24.52    19.48    44.00     0.613    0.487
 1.100      21.998       0.058         4.097         1.117
SOU     Ret.SCR                        40
   10968.      8711.     19679.   103.49    82.19   185.68     2.758    2.190
 4.948      92.841       0.281        17.291         4.716
ENTG    Ret.SCR                        40
    1868.      1483.      3351.    18.84    14.96    33.81     0.537    0.426
 0.963       7.945       0.075         3.262         0.890
SPPN    Ret.SCR                        40
    1619.      1286.      2904.    15.70    12.47    28.17     0.542    0.430
 0.972      14.085       0.037         2.623         0.715
SPPS    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SCR                        40
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SCR                        40
   54371.     46661.    101032.   530.92   456.67   987.59    14.527   12.406
26.932     465.342       1.787        93.006        25.365
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistScrub & SCR          41         (Emissions By R
egion)       Generation                    Trillion                Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub & SCR          41
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub & SCR          41
   52736.      41884.      94621.   523.44   415.72   939.16    13.749   10.920
24.669     198.824       0.422        87.457        23.852
ERCT    Ret.ExistScrub & SCR          41
    9766.       8531.      18297.   100.06    87.49   187.55     2.501    2.187
 4.689      28.779       0.386        18.243         4.975
MACE    Ret.ExistScrub & SCR          41
    2411.       1915.       4326.    24.06    19.11    43.18     0.602    0.478
 1.079       3.277       0.040         4.021         1.097
MACW    Ret.ExistScrub & SCR          41
    7574.       6016.      13590.    70.28    55.81   126.09     1.757    1.395
 3.152       5.655       0.116        11.742         3.202
MACS    Ret.ExistScrub & SCR          41
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistScrub & SCR          41
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistScrub & SCR          41
    3013.       2393.       5406.    30.95    24.58    55.53     0.902    0.717
 1.619       9.837       0.018         5.171         1.410
MAPP    Ret.ExistScrub & SCR          41
    3615.       2871.       6486.    35.96    28.56    64.51     0.899    0.714
 1.613       4.710       0.110         6.224         1.698
UPNY    Ret.ExistScrub & SCR          41
     618.        491.       1110.     5.85     4.64    10.49     0.146    0.116
 0.262       0.462       0.010         0.977         0.266
DSNY    Ret.ExistScrub & SCR          41
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistScrub & SCR          41
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistScrub & SCR          41
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistScrub & SCR          41
     789.        637.       1426.     7.64     6.16    13.80     0.191    0.154
 0.345       0.759       0.013         1.285         0.351
FRCC    Ret.ExistScrub & SCR          41
   18560.      14740.      33300.   182.91   145.27   328.18     4.630    3.677
 8.308      76.011       0.120        30.561         8.335
VACA    Ret.ExistScrub & SCR          41
    1121.        890.       2011.    11.07     8.79    19.86     0.315    0.251
 0.566       1.400       0.005         1.850         0.504
```

```
TVA     Ret.ExistScrub & SCR          41
     515.       409.       923.     5.48     4.35     9.83     0.137    0.109
 0.246       2.950       0.002         0.916         0.250
SOU     Ret.ExistScrub & SCR          41
    3619.      2874.      6493.    37.99    30.17    68.16     0.950    0.754
 1.704       9.482       0.020         6.348         1.731
ENTG    Ret.ExistScrub & SCR          41
    2781.      2208.      4989.    27.95    22.19    50.14     0.699    0.555
 1.254       5.616       0.055         4.837         1.319
SPPN    Ret.ExistScrub & SCR          41
    4059.      3224.      7283.    41.37    32.86    74.24     1.034    0.822
 1.856      12.350       0.082         7.162         1.953
SPPS    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub & SCR          41
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub & SCR          41
  111177.     89084.    200260.  1105.00   885.74  1990.74    28.513   22.849
51.362     360.112       1.398       186.795        50.944
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.SNCR                     42         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SNCR                      42
    2154.      1524.      3678.    22.56    15.95    38.51     4.898    3.505
 8.403      20.132       0.059         3.586         0.978
ERCT    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.SNCR                      42
     747.       593.      1340.     8.74     6.94    15.68     1.332    1.058
 2.391       7.838       0.004         1.460         0.398
MANO    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SNCR                      42
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SNCR                      42
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SNCR                      42
    2901.      2117.      5018.    31.30    22.89    54.18     6.230    4.563
10.794      27.970       0.062         5.046         1.376
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistScrub & SNCR         43         (Emissions By R
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub & SNCR         43
     722.       574.      1296.     8.00     6.36    14.36     1.362    1.082
 2.444       2.349       0.012         1.337         0.365
ERCT    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistScrub & SNCR         43
     278.       169.       448.     2.89     1.76     4.66     0.752    0.458
 1.210       1.327       0.008         0.434         0.118
MANO    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
NENG    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub & SNCR         43
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub & SNCR         43
    1000.       743.      1743.    10.90     8.12    19.01     2.114    1.540
 3.654       3.676       0.020         1.771         0.483
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.SCR+Scrb                 44         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SCR+Scrb                   44
   91849.     72949.    164798.   898.79   713.84  1612.63    24.745   19.653
44.399     123.265       0.821       150.172        40.956
ERCT    Ret.SCR+Scrb                   44
    4123.      3474.      7597.    43.50    36.77    80.27     1.088    0.919
 2.007       4.569       0.090         7.561         2.062
MACE    Ret.SCR+Scrb                   44
     741.       598.      1339.     6.32     5.10    11.43     0.158    0.128
 0.286       0.503       0.011         1.064         0.290
MACW    Ret.SCR+Scrb                   44
   15220.     12088.     27308.   148.52   117.96   266.48     3.713    2.949
 6.662      18.802       0.260        24.815         6.768
MACS    Ret.SCR+Scrb                   44
   10271.      8158.     18429.    96.77    76.86   173.62     2.908    2.310
 5.218       7.981       0.152        16.168         4.410
WUMS    Ret.SCR+Scrb                   44
    5579.      4431.     10011.    57.20    45.43   102.63     1.430    1.136
 2.566       4.329       0.181         9.901         2.700
MANO    Ret.SCR+Scrb                   44
   30327.     24086.     54413.   312.81   248.44   561.25     9.770    7.759
17.529      56.194       0.210        52.265        14.254
MAPP    Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.SCR+Scrb                   44
    3246.      2578.      5825.    34.47    27.38    61.85     0.862    0.684
 1.546       2.721       0.057         5.759         1.571
DSNY    Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.SCR+Scrb                   44
    5571.      4424.      9995.    53.23    42.27    95.50     1.331    1.057
 2.387       3.921       0.079         8.893         2.425
FRCC    Ret.SCR+Scrb                   44
    7831.      6219.     14050.    75.11    59.66   134.77     1.905    1.513
 3.418      16.846       0.054        12.550         3.423
VACA    Ret.SCR+Scrb                   44
   22810.     18127.     40937.   219.64   174.55   394.19     5.517    4.384
 9.901      12.271       0.104        36.708        10.011
TVA     Ret.SCR+Scrb                   44
    6858.      5447.     12306.    68.85    54.68   123.53     1.721    1.367
 3.088       5.349       0.036        11.503         3.137
SOU     Ret.SCR+Scrb                   44
   32351.     25694.     58045.   321.15   255.06   576.21     8.212    6.523
14.735      41.847       0.261        53.658        14.634
ENTG    Ret.SCR+Scrb                   44
    8672.      6887.     15559.    92.17    73.20   165.37     2.304    1.830
 4.134      12.402       0.268        15.399         4.200
SPPN    Ret.SCR+Scrb                   44
     857.       681.      1538.     9.89     7.86    17.75     0.282    0.224
 0.506       0.497       0.020         1.712         0.467
SPPS    Ret.SCR+Scrb                   44
   10511.      8348.     18859.   109.93    87.31   197.25     2.748    2.183
 4.931       5.917       0.050        18.368         5.009
CALI    Ret.SCR+Scrb                   44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SCR+Scrb                   44
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SCR+Scrb                  44
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SCR+Scrb                  44
  256818.    204190.    461009.  2548.35  2026.36  4574.71    68.694   54.619  1
23.313     317.415       2.656       426.499       116.318
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.SNCR+Scrub                45         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
DSNY    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SNCR+Scrub                45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.Gas Reburn                46         (Emissions By R
egion)       Generation                    Trillion                   Emission
          Emission    Emission      Emission       Emission
```

```
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.Gas Reburn                46
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Gas Reburn                46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistScrub+GasR          47         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
               (GWh)                           (Btu)                  (1000 Tons)
          (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MANO    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub+GasR           47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.GasReburn+Scrub           48         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.GasReburn+Scrub           48
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.GasReburn+Scrub           48
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.GasReburn+Scrub           48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ACI                       49         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ACI                       49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

MACW Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE Ret.ACI 49
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI                        49
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistScrub&ACI            50         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub&ACI            50
     575.        464.       1039.     5.92     4.78    10.69     1.187    0.958
 2.144       1.947       0.009         0.996         0.272
MACS    Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistScrub&ACI            50
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistScrub&ACI            50
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistScrub&ACI            50
     693.       550.      1244.     7.21     5.72    12.93     1.388    1.102
 2.490       2.328       0.003         1.204         0.328
TVA     Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistScrub&ACI            50
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistScrub&ACI            50
    1268.      1014.      2282.    13.13    10.50    23.63     2.574    2.060
 4.634       4.275       0.012         2.200         0.600
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistSCR&ACI              51         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
ECAO    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR&ACI              51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
```

```
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------
```

```
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistSNCR&ACI            52         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSNCR&ACI             52
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR&ACI             52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ACI & SCR                53         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
```

		(GWh)			(Btu)			(1000 Tons)	
		(1000 Tons)	(Tons)		(Mil Tonnes)	(Mil Tonnes)			
	WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
ECAO	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
ERCT	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MACE	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MACW	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MACS	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
WUMS	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MANO	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
MAPP	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
UPNY	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
DSNY	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
NYC	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
LILC	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
NENG	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
FRCC	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
VACA	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
TVA	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
SOU	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
ENTG	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000
	0.000	0.000	0.000	0.000	0.000			
SPPN	Ret.	ACI & SCR		53				
	0.	0.	0.	0.00	0.00	0.00	0.000	0.000

```
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI & SCR                 53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistScrub&ACI&SCR        54         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistScrub&ACI&SCR        54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistScrub&ACI&SCR        54
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
MAPP    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
UPNY    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
DSNY    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
NYC     Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
LILC    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
NENG    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
FRCC    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
VACA    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
TVA     Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
SOU     Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
ENTG    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
SPPN    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
SPPS    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
CALI    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
PNW     Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
AZNM    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
RMPA    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
NWPE    Ret.ExistScrub&ACI&SCR         54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000

Total Ret.ExistScrub&ACI&SCR        54
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------------

--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------
-------------------------------------------------------
                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ACI & SNCR                55         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total          Total

MECS    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI & SNCR                55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistScrub&ACI&SNCR       56         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistScrub&ACI&SNCR       56
```

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE Ret.ExistScrub&ACI&SNCR 56
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
Total Ret.ExistScrub&ACI&SNCR       56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ACI & Srub                57         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                            (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ACI & Srub                57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistSCR&ACI&Scrub        58         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSCR&ACI&Scrub        58
```

```
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
ERCT    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
MACE    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
MACW    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
MACS    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
WUMS    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
MANO    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
MAPP    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
UPNY    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
DSNY    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
NYC     Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
LILC    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
NENG    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
FRCC    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
VACA    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
TVA     Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
SOU     Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
ENTG    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
SPPN    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
SPPS    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
CALI    Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
PNW     Ret.ExistSCR&ACI&Scrub         58
       0.          0.          0.      0.00      0.00      0.00      0.000     0.000
 0.000       0.000       0.000          0.000          0.000
```

```
AZNM    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR&ACI&Scrub        58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistSNCR&ACI&Scrub       59         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSNCR&ACI&Scrub       59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR&ACI&Scrub       59
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistSNCR&ExistScrub&ACI  60         (Emissions By R
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                         (Btu)                   (1000 Tons)
```

```
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total          Total

MECS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
SPPS    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSNCR&ExistScrub&ACI  60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistSCR&ExistScrub&ACI   61         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.ExistSCR&ExistScrub&ACI   61
    5155.      4094.      9248.    48.30    38.36    86.67     1.579    1.254
 2.834       9.533       0.080         8.071         2.201
MACW    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.ExistSCR&ExistScrub&ACI   61
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

```
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistSCR&ExistScrub&ACI   61
       0.          0.          0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistSCR&ExistScrub&ACI   61
    5155.       4094.       9248.    48.30    38.36    86.67     1.579    1.254
 2.834       9.533       0.080         8.071         2.201
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
```

```
-------------------------------------------------------
                                                                                                NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.ExistNOx&ExistScrub&ACI   62         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total          Total

MECS    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
ECAO    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
ERCT    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACE    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACW    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MACS    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
WUMS    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MANO    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
MAPP    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
UPNY    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
DSNY    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
NYC     Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
LILC    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
NENG    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
FRCC    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
VACA    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
TVA     Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000          0.000
```

```
SOU     Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.SCR & Scrub & ACI         63         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
MACS Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total Ret.SCR & Scrub & ACI 63
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2020, Plant Type: Ret.SNCR & Scrub & ACI 64 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.SNCR & Scrub & ACI 64
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

```
FRCC    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.O/G SCR                 65         (Emissions By R
egion)       Generation                    Trillion                Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
```

0.000 0.000 0.000 0.000 0.000
ERCT Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW Ret.O/G SCR 65
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM Ret.O/G SCR 65

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.O/G SNCR                 66         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.O/G SNCR                   66
       0.      1033.      1033.     0.00    10.08    10.08     0.000    0.737
 0.737       0.000       0.000         0.535         0.146
MACE    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.O/G SNCR                   66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
NYC     Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.O/G SNCR                    66
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.O/G SNCR                  66
       0.      1033.      1033.     0.00    10.08    10.08     0.000    0.737
 0.737       0.000       0.000         0.535         0.146
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.Nuclear (age 30+10 yrs)   67         (Emissions By R
egion)       Generation                    Trillion                    Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)
```

		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
ECAO	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
ERCT	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
MACE	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
MACW	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
MACS	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
WUMS	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
MANO	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
MAPP	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
UPNY	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
DSNY	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
NYC	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
LILC	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
NENG	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
FRCC	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
VACA	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
TVA	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
SOU	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
ENTG	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
SPPN	Ret.Nuclear (age 30+10 yrs)	67							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
SPPS	Ret.Nuclear (age 30+10 yrs)	67							

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret.Nuclear (age 40+20 yrs)   68         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

```
MAPP    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
```

```
                                                                                                                                NOx
              SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Ret. Biomass Cofiring         69         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                           (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Ret. Biomass Cofiring         69
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: CT Early Retirement           70         (Emissions By R
egion)       Generation                    Trillion                 Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                   (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

MACS CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
RMPA CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NWPE CT Early Retirement 70
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

Total CT Early Retirement 70

0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000

NOx
SO2 MER CO2 Carbon
Year: 2020, Plant Type: CC Early Retirement 71 (Emissions By R
egion) Generation Trillion Emission
Emission Emission Emission Emission

(GWh) (Btu) (1000 Tons)
(1000 Tons) (Tons) (Mil Tonnes) (Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

MECS CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ECAO CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ERCT CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG CC Early Retirement 71
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC CC Early Retirement 71

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: O/G Early Retirement          72         (Emissions By R
egion)       Generation                    Trillion                Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
```

ERCT O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACE O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACW O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MACS O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
WUMS O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MANO O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
MAPP O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
UPNY O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
DSNY O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NYC O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
LILC O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
NENG O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
FRCC O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
VACA O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
TVA O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SOU O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
ENTG O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPN O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
SPPS O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
CALI O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
PNW O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
AZNM O/G Early Retirement 72
0. 0. 0. 0.00 0.00 0.00 0.000 0.000

```
 0.000       0.000       0.000         0.000         0.000
RMPA    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Coal Early Retirement         73         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-----------------------------------------------------
              (GWh)                          (Btu)                    (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

MECS    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ECAO    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ERCT    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACE    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACW    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MACS    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
WUMS    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MANO    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
MAPP    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
UPNY    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
DSNY    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NYC     Coal Early Retirement         73
```

```
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
LILC    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NENG    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
FRCC    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
VACA    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
TVA     Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SOU     Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
ENTG    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPN    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
SPPS    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
CALI    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------

                                                                        NOx
             SO2         MER           CO2          Carbon
Year: 2020, Plant Type: Nuke Early Retirement         74         (Emissions By R
egion)       Generation                    Trillion                  Emission
          Emission    Emission      Emission       Emission
-------------------------------------------------
              (GWh)                          (Btu)                  (1000 Tons)
         (1000 Tons)   (Tons)     (Mil Tonnes)  (Mil Tonnes)
```

		WINTER Total	SUMMER Total	Total Total	WINTER Total	SUMMER Total	Total Total	WINTER	SUMMER
MECS	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
ECAO	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
ERCT	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
MACE	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
MACW	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
MACS	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
WUMS	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
MANO	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
MAPP	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
UPNY	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
DSNY	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
NYC	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
LILC	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
NENG	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
FRCC	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
VACA	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
TVA	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
SOU	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
ENTG	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
SPPN	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000
0.000	0.000	0.000	0.000	0.000					
SPPS	Nuke Early Retirement	74							
		0.	0.	0.	0.00	0.00	0.00	0.000	0.000

```
 0.000       0.000       0.000         0.000         0.000
CALI    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
PNW     Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
AZNM    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
RMPA    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
NWPE    Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-------------------------------------------------------------

                                                                          NOx
             SO2         MER           CO2          Carbon
Year: 2020, System Totals (By Region)Generation Trillion
             Emission                      Emission                  Emission
          Emission    Emission
------------------------------------ (GWh)
              (Btu)                        (1000 Tons)              (1000 Tons)
          (Tons)      (Mil Tonnes)(Mil Tonnes)

  WINTER     SUMMER      Total    WINTER   SUMMER    Total    WINTER   SUMMER
 Total      Total       Total         Total         Total

Region MECS
   71984.     54096.    126080.   650.08   496.21  1146.29    52.763   41.000
93.763     304.467       1.339        86.014        23.458
Region ECAO
  343542.    260999.    604541.  3313.03  2529.49  5842.52   155.373  118.503  2
73.876     867.773       3.652       492.865       134.418
Region ERCT
  167414.    185798.    353212.  1415.16  1618.77  3033.93    57.622   86.298  1
43.921     200.438       2.076       175.370        47.828
Region MACE
   77303.     61934.    139237.   729.63   585.20  1314.83    16.500   13.486
29.986      69.153       1.156        39.583        10.795
Region MACW
   69710.     50089.    119799.   647.92   472.25  1120.17    18.436   14.370
32.806      78.691       1.091        74.804        20.401
Region MACS
   32552.     24858.     57410.   313.79   239.93   553.72     9.569    7.843
17.412      17.314       0.456        33.920         9.251
Region WUMS
   41901.     30800.     72701.   406.45   302.62   709.06    36.564   27.385
63.949     168.528       1.050        52.353        14.278
Region MANO
  148890.    113803.    262694.  1501.62  1149.71  2651.33    72.435   54.257  1
26.692     365.795       1.759       139.926        38.162
Region MAPP
```

```
  107209.     83151.    190359.  1055.92   821.59  1877.51   155.500  118.940  2
74.440     462.490       3.687       148.197        40.417
Region UPNY
   48837.     36245.     85082.   319.84   250.36   570.20    17.103   10.790
27.893      65.826       0.633        25.728         7.017
Region DSNY
   23677.     18807.     42485.   182.58   147.32   329.89     7.409    5.056
12.465      26.855       0.348        15.943         4.348
Region NYC
    7916.      7309.     15226.    58.33    59.80   118.13     1.205    2.316
 3.521       0.000       0.000         6.269         1.710
Region LILC
   12740.      9728.     22468.    93.43    73.61   167.04     1.145    1.117
 2.262       0.000       0.355         8.234         2.246
Region NENG
   90009.     63835.    153844.   691.07   498.42  1189.50    12.322    9.144
21.466      21.103       1.841        47.523        12.961
Region FRCC
  137930.    115042.    252972.  1195.32  1002.51  2197.83    26.979   24.132
51.111     157.173       1.510       125.572        34.247
Region VACA
  211501.    163506.    375007.  1946.58  1520.83  3467.41    68.710   51.947  1
20.657     304.965       1.759       184.971        50.447
Region TVA
  120824.     93107.    213931.  1061.43   843.22  1904.65    39.406   31.690
71.096     219.905       0.617       112.561        30.698
Region SOU
  218689.    177775.    396464.  1887.77  1563.06  3450.83    53.246   48.857  1
02.104     369.974       1.356       221.545        60.421
Region ENTG
  100596.     80868.    181464.   929.07   741.79  1670.86    32.228   26.086
58.314      84.413       1.029        87.336        23.819
Region SPPN
   47440.     38045.     85485.   474.85   386.00   860.84    68.137   54.669  1
22.806     116.504       1.305        69.684        19.005
Region SPPS
   81461.     77051.    158512.   686.29   661.00  1347.29    63.123   60.587  1
23.710     187.866       1.402       102.975        28.084
Region CALI
  191670.    143458.    335127.  1543.49  1126.36  2669.85    14.959   10.273
25.232      18.728       1.093        92.247        25.158
Region PNW
  123825.     94342.    218167.   430.69   340.70   771.39    21.624   18.171
39.795      21.413       0.440        41.658        11.361
Region AZNM
  124050.     97007.    221057.  1085.57   847.79  1933.37    96.410   76.707  1
73.117      94.915       1.214       111.119        30.305
Region RMPA
   36353.     28628.     64981.   317.81   244.99   562.81    56.859   44.891  1
01.750      77.571       0.433        49.854        13.597
Region NWPE
   56775.     45741.    102516.   572.82   456.07  1028.89   112.218   88.823  2
01.042     105.694       1.126        90.241        24.611

System Total
 2694798.   2156024.   4850822. 23510.52 18979.60 42490.13  1267.846 1047.338 23
15.184    4407.554      32.729      2636.492       719.043
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-----------------------------------------------------
(**) Industrial Boiler generation not included in generation totals

-------------------------------------------------------------------------------
-------------------------------------------------------------------------------
-----------------------------------------------------
```

NOx
SO2 MER CO2 Carbon
Year: 2020, System Totals (Emissions By Plant Type)Generation Trillion
Emission Emission Emission
Emission Emission
---------- (GWh)
(Btu) (1000 Tons) (1000 Tons)
(Tons) (Mil Tonnes)(Mil Tonnes)

WINTER SUMMER Total WINTER SUMMER Total WINTER SUMMER
Total Total Total Total Total

Total Scrubbed Coal_NOx 1
108008. 85678. 193686. 1054.90 836.56 1891.46 37.501 29.535
67.036 207.580 1.044 176.280 48.076
Total Scrubbed Coal 2
170180. 138894. 309073. 1776.22 1452.67 3228.89 365.005 295.043 6
60.048 388.994 5.430 307.118 83.760
Total Unscrubbed Coal_NOx 3
42325. 31322. 73647. 410.17 302.68 712.85 32.825 22.946
55.771 337.157 1.358 67.287 18.351
Total Unscrubbed Coal 4
238669. 181232. 419901. 2442.12 1855.13 4297.25 447.925 341.348 7
89.273 1928.000 8.298 406.627 110.898
Total Oil/Gas Steam 5
1053. 24309. 25363. 10.10 241.09 251.18 1.005 29.549
30.554 0.000 0.000 13.330 3.636
Total Oil/Gas Steam_Nox 6
0. 1641. 1641. 0.00 16.26 16.26 0.000 0.973
0.973 0.000 0.000 0.863 0.235
Total Nuclear 7
447949. 338850. 786799. 4720.33 3571.42 8291.75 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Hydro 8
154390. 114990. 269380. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Comb.Cycle Gas 9
663917. 508295. 1172212. 4899.94 3764.59 8664.53 61.089 48.654 1
09.743 0.000 0.001 459.830 125.408
Total IGCC 10
2652. 2050. 4702. 19.30 14.91 34.21 0.902 0.697
1.598 0.000 0.006 3.185 0.869
Total Turbine 11
28537. 67431. 95969. 257.83 644.15 901.98 12.396 30.554
42.949 0.000 0.000 47.868 13.055
Total Biomass 12
5979. 4046. 10025. 53.13 35.93 89.07 0.531 0.359
0.891 3.563 0.025 0.000 0.000
Total Geothermal 13
13772. 10799. 24571. 369.68 289.40 659.08 0.000 0.000
0.000 0.000 1.027 0.000 0.000
Total Landfill Gas 14
4415. 3278. 7694. 51.28 38.22 89.50 6.308 4.701
11.009 0.000 0.000 0.000 0.000
Total Wind 15
11786. 6486. 18272. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Fuel Cell 16
39. 28. 67. 0.29 0.21 0.50 0.058 0.042
0.100 0.000 0.000 0.026 0.007
Total Solar 17
580. 312. 892. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Non Fossil_Other 18

10028. 7909. 17936. 110.04 86.79 196.83 0.000 0.000
0.000 0.000 5.684 0.000 0.000
Total Fossil_Other 19
559. 426. 985. 6.15 4.69 10.84 1.425 1.087
2.512 0.012 0.018 0.000 0.000
Total Pump Storage 20
3628. 5322. 8950. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Int. Imports 21
13160. 9497. 22657. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Cgn_Coal 22
10508. 8403. 18911. 91.81 73.27 165.08 15.769 12.559
28.328 76.997 0.310 15.387 4.196
Total Cgn_Gas 23
92909. 67647. 160555. 732.61 528.71 1261.32 22.005 16.882
38.887 0.000 0.000 66.939 18.256
Total Cgn_Oil 24
1741. 1153. 2894. 13.16 8.75 21.92 0.099 0.100
0.199 0.000 0.000 1.163 0.317
Total Cgn_Other 25
4093. 3186. 7279. 28.13 21.53 49.66 1.271 1.164
2.434 1.004 0.447 0.000 0.000
Total NonCG IPP_Coal 26
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Gas 27
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total NonCG IPP_Other 28
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Coal 29
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Gas 30
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Oil 31
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Blr_Other 32
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total SteamOnly Cogen 33
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Rep.Coal-CC 34
955. 732. 1687. 6.89 5.29 12.18 0.069 0.053
0.122 0.000 0.000 0.646 0.176
Total Rep.O/G-CC 35
35202. 27002. 62204. 254.16 194.95 449.11 2.542 1.950
4.491 0.000 0.000 23.834 6.500
Total Rep.Coal-IGCC 36
0. 0. 0. 0.00 0.00 0.00 0.000 0.000
0.000 0.000 0.000 0.000 0.000
Total Ret.Scrubber 37
41324. 34055. 75379. 429.60 354.43 784.03 84.240 68.887 1
53.127 55.177 1.434 74.102 20.210
Total Ret.ExistSCR & Scrub 38
141564. 112433. 253998. 1367.33 1085.96 2453.29 33.821 26.861
60.683 200.031 1.321 228.457 62.306
Total Ret.ExistSNCR & Scrub 39
12189. 9681. 21870. 117.46 93.29 210.75 16.829 13.366
30.195 20.716 0.310 19.626 5.353

```
Total Ret.SCR                        40
   54371.     46661.    101032.   530.92   456.67   987.59    14.527   12.406
26.932     465.342       1.787        93.006        25.365
Total Ret.ExistScrub & SCR           41
  111177.     89084.    200260.  1105.00   885.74  1990.74    28.513   22.849
51.362     360.112       1.398       186.795        50.944
Total Ret.SNCR                       42
    2901.      2117.      5018.    31.30    22.89    54.18     6.230    4.563
10.794      27.970       0.062         5.046         1.376
Total Ret.ExistScrub & SNCR          43
    1000.       743.      1743.    10.90     8.12    19.01     2.114    1.540
 3.654       3.676       0.020         1.771         0.483
Total Ret.SCR+Scrb                   44
  256818.    204190.    461009.  2548.35  2026.36  4574.71    68.694   54.619  1
23.313     317.415       2.656       426.499       116.318
Total Ret.SNCR+Scrub                 45
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Gas Reburn                 46
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub+GasR            47
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.GasReburn+Scrub            48
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI                        49
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI             50
    1268.      1014.      2282.    13.13    10.50    23.63     2.574    2.060
 4.634       4.275       0.012         2.200         0.600
Total Ret.ExistSCR&ACI               51
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI              52
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SCR                  53
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SCR         54
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & SNCR                 55
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistScrub&ACI&SNCR        56
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ACI & Srub                 57
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ACI&Scrub         58
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ACI&Scrub        59
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSNCR&ExistScrub&ACI   60
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.ExistSCR&ExistScrub&ACI    61
    5155.      4094.      9248.    48.30    38.36    86.67     1.579    1.254
```

```
 2.834       9.533       0.080         8.071         2.201
Total Ret.ExistNOx&ExistScrub&ACI   62
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SCR & Scrub & ACI         63
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.SNCR & Scrub & ACI        64
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SCR                   65
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.O/G SNCR                  66
       0.      1033.      1033.     0.00    10.08    10.08     0.000    0.737
 0.737       0.000       0.000         0.535         0.146
Total Ret.Nuclear (age 30+10 yrs)   67
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret.Nuclear (age 40+20 yrs)   68
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Ret. Biomass Cofiring         69
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CT Early Retirement           70
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total CC Early Retirement           71
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total O/G Early Retirement          72
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Coal Early Retirement         73
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000
Total Nuke Early Retirement         74
       0.         0.         0.     0.00     0.00     0.00     0.000    0.000
 0.000       0.000       0.000         0.000         0.000

System Total
 2694798.   2156024.   4850822. 23510.52 18979.60 42490.13  1267.846 1047.338 23
15.184    4407.554      32.729      2636.492       719.043
System Total Without Imports
 2681639.   2146527.   4828165. 23510.52 18979.60 42490.13  1267.846 1047.338 23
15.184    4407.554      32.729      2636.492       719.043
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
-------------------------------------------------------
(**) Industrial Boiler generation in BBtu, not included in generation totals
```