BAKER BOTTS L.L.P.

THE WARNER
1299 PENNSYLVANIA AVE., NW
WASHINGTON, D.C.
20004-2400
202.639.7700
FAX 202.639.7890

AUSTIN
BAKU
DALLAS
DUBAI
HONG KONG
HOUSTON
LONDON
MOSCOW
NEW YORK
RIYADH
WASHINGTON

~~JUL 8 2005~~
Received

JUL 11 2005
D. Tatt

July 11, 2005

William M. Bumpers
(202) 639-7718
FAX (202) 639-7890
William.Bumpers@BakerBotts.com

BY HAND DELIVERY

The Honorable Stephen L. Johnson
Administrator
United States Environmental Protection Agency
Ariel Rios Building (Mail Code 1101)
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Re: Petition for Reconsideration of the Final Clean Air Interstate Rule - EPA Docket No. OAR-2003-0053.

Dear Administrator Johnson:

Pursuant to Section 307(d)(7)(B) of the Clean Air Act, 42 U.S.C. §7607(d)(7)(B), the City of Amarillo, Texas, El Paso Electric Company, Occidental Permian Ltd. and Southwestern Public Service Company, d/b/a/ Xcel Energy (collectively, "Petitioners") have enclosed for filing with the U.S. Environmental Protection Agency's Office of the Administrator ("EPA") an original and two copies of their Petition for Reconsideration of the EPA's Final Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone, published in the Federal Register on May 12, 2005, and commonly referred to as the "Clean Air Interstate Rule" or "CAIR."

A copy of the enclosed Petition is being provided, as a courtesy, to EPA's Office of General Counsel. An additional copy of the Petition is enclosed to be file-stamped and returned to the messenger.

Thank you for your assistance with this matter. Should you have any questions, please do not hesitate to contact me at (202) 639-7718.

Respectfully submitted,

William M. Bumpers
Counsel for Petitioners

Enclosures

cc: Office of General Counsel, EPA

DC01:421198.1

BEFORE THE ADMINISTRATOR OF THE
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In Re: Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to the NOx SIP Call; Final Rule	)	RIN 2060-AL76 EPA Docket No. OAR-2003-0053

PETITION FOR RECONSIDERATION

In accordance with Section 307(d)(7)(B) of the Clean Air Act ("CAA" or "Act"), 42 U.S.C. §7607(d)(7)(B), the City of Amarillo, Texas ("City of Amarillo"), El Paso Electric Company, Occidental Permian Ltd., and Southwestern Public Service Company, d/b/a Xcel Energy ("Xcel Energy") (collectively, the "Petitioners") hereby submit to the Administrator of the United States Environmental Protection Agency ("EPA") their Petition for Reconsideration of the EPA's Final Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone, published in the Federal Register on May 12, 2005, and commonly referred to as the "Clean Air Interstate Rule" or "CAIR." See 70 Fed. Reg. 25161 (May 12, 2005). A copy of the final rule is provided as Attachment 1 to this Petition. The Petitioners request that EPA exclude from CAIR all Texas counties west of Interstate Highways 35 and 37 (collectively "West Texas"), as specifically defined in Section I.D. of this Petition. West Texas should be excluded from CAIR because it does not contribute significantly to nonattainment with the fine particulate matter ("$PM_{2.5}$") National Ambient Air Quality Standard ("NAAQS") in any downwind jurisdiction.

EPA's regulation of West Texas under CAIR is not only arbitrary and capricious, but it is bad public policy. CAIR applies to West Texas based on EPA's determination that the entire State of Texas contributes significantly to $PM_{2.5}$ nonattainment in two Illinois counties east of St. Louis. EPA's "whole state" approach may have merit for most CAIR states, but it produces absurd results in Texas. West Texas is a vast region with few people and low emissions that cannot possibly worsen $PM_{2.5}$ air quality in the St. Louis area. A glance at a map shows that West Texas is located hundreds of miles farther west than the rest of the CAIR region and is properly treated as a western state for air quality management purposes. This is evident given than states with higher emission densities than West Texas, and over which West Texas emissions must travel to reach St. Louis (Kansas, Oklahoma and Arkansas), are not regulated under CAIR for $PM_{2.5}$. The hundreds of millions of dollars in CAIR compliance costs for West Texas sources cannot be justified because the resulting emissions reductions simply will not achieve any significant incremental improvement in downwind ambient air quality.

In addition to the above, the Petitioners' request for reconsideration is supported by new $PM_{2.5}$ modeling data for West Texas. This new modeling separately assesses the effect of West Texas emissions on downwind $PM_{2.5}$ nonattainment. This new modeling data was not available during the public comment period on the proposed rule and is of central relevance to the outcome of the final rule. Thus, reconsideration of CAIR, with respect to its inclusion of West Texas, is warranted under Section 307 of the Act. The modeling demonstrates that this effect is far below the significance threshold that EPA adopted in CAIR. In light of this new information, there can be no further justification for regulating West Texas under CAIR and EPA should revise the regulation to exclude West Texas.

I. INTRODUCTION

A. Standard for Petition for Reconsideration

Section 307(d)(7)(B) of the Act requires EPA to reconsider a final rule where an interested party raises an objection to the rule that was impracticable to raise during the public comment period or where the grounds for such objection arose after the public comment period but within the judicial review period for the rulemaking. See 42 U.S.C. §7607(d)(7)(B). Petitioners object to EPA's inclusion of West Texas in CAIR as arbitrary, capricious and otherwise not in accordance with law and request EPA to reconsider the inclusion of West Texas in CAIR based on the results of new, subregional $PM_{2.5}$ modeling conducted by Alpine Geophysics, LLC ("Alpine") and for the other reasons set forth in this Petition. This new modeling demonstrates that $PM_{2.5}$ emissions from West Texas sources, using the same "zero out" methodology as was applied in CAIR, will not contribute to nonattainment with the $PM_{2.5}$ NAAQS in either Madison County or St. Clair County, Illinois, the only two areas for which EPA determined that the State of Texas would contribute significantly to $PM_{2.5}$ nonattainment.

The need for Petitioners to develop this subregional data did not arise until EPA published the final rule in the Federal Register and it became evident that EPA had not conducted more detailed, subregional modeling in response to significant comments submitted on the proposed rule. Moreover, it would have been impractical for Petitioners to obtain EPA's massive data sets, duplicate EPA's modeling and conduct the subregional analysis itself before EPA had fully completed and documented the modeling, which occurred after the close of the comment period.[1] Thus, in accordance with Section 307 of the Act, the circumstances upon which this Petition are based arose after the close of the comment period for, but within the period for seeking judicial review of, the rule.

---

[1] Petitioners note that EPA's modeling data is larger than 4 terabytes, which would consume more than 6,000 CD ROMs. It is unrealistic to expect modeling involving such massive data to be accurately duplicated until the original process and documentation is complete.

B. Procedural Background of CAIR

On January 30, 2004, EPA published in the Federal Register its Proposed Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone, then referred to as the "Interstate Air Quality Rule" or "IAQR." See 69 Fed. Reg. 4565 (January 30, 2004). The proposed rule required reductions in nitrogen oxides ("NOx") and sulfur dioxide ("SO_2") emissions from 28 states and the District of Columbia based on EPA's finding that those jurisdictions will contribute significantly to nonattainment of the $PM_{2.5}$ NAAQS in downwind jurisdictions. Under the proposed rule, EPA determined whether a state contributes significantly to $PM_{2.5}$ nonattainment in a downwind state by modeling regional emissions using the Regional Modeling System for Aerosols and Deposition ("REMSAD"), and eliminating the state's anthropogenic NOx and SO_2 emissions. Specifically, if the modeling predicted that the ambient air quality concentration of $PM_{2.5}$ in downwind nonattainment areas would improve by more than 0.15 $\mu g/m^3$, EPA concluded that the state contributed significantly to downwind nonattainment and included it in the proposal.[2] Using this method, EPA determined that emissions from the State of Texas would contribute significantly to downwind $PM_{2.5}$ nonattainment because the maximum downwind contribution, which would occur in St. Clair County, Illinois, would be greater than the proposed threshold. 69 Fed. Reg. at 4608, Table V-5. Accordingly , EPA included the entire State of Texas in the proposed rule.

After issuing the proposed rule, EPA, on August 6, 2004, published in the Federal Register a notice of data availability ("NODA") of revised modeling for the rule. See Notice of Availability of Additional Information Supporting the Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 69 Fed. Reg. 47828 (August 6, 2004). The revised modeling consisted of additional meteorological data, updated emissions data, an updated air quality model and revised procedures for projecting future air quality concentrations. See 69 Fed. Reg. at 47828. The NODA indicated that, instead of REMSAD, EPA would use the Community Multi-Scale Air Quality model ("CMAQ") to assess a state's contribution to downwind nonattainment areas. Using CMAQ, EPA continued to model the entire State of Texas.

On May 12, 2005, EPA published in the Federal Register the final CAIR, which requires 23 states and the District of Columbia to reduce emissions of NOx and SO_2 based on EPA's finding that emissions from those jurisdictions will contribute significantly to nonattainment, or interfere with maintenance, of the $PM_{2.5}$ NAAQS in downwind states. Pursuant to its authority under Section 110(a)(2)(D) of the CAA, EPA is requiring each of these upwind jurisdictions to revise its State Implementation Plan ("SIP") to include control measures that will reduce SO_2 and NOx as precursors to the formation of $PM_{2.5}$. In the final rule, EPA projected SO_2 and NOx emissions to the year 2010, assuming the use of certain required controls (but not controls required under CAIR), and then modeled the impact of those projected emissions on downwind $PM_{2.5}$ nonattainment in that year. If the maximum contribution of an

---

[2] EPA's "contribute significantly" determinations consisted of an air quality analysis and a cost analysis. With respect to Texas, however, EPA's cost analysis did not change the outcome.

upwind state to any downwind nonattainment area was above 0.20 $\mu g/m^3$ (increased from 0.15 $\mu g/m^3$ in the proposal), EPA included the state in CAIR's regulatory requirements. Using this method, EPA determined that the downwind contribution of $PM_{2.5}$ emissions from the State of Texas would be greater than the threshold in two counties: 0.29 $\mu g/m^3$ in Madison County, Illinois and 0.28 $\mu g/m^3$ in St. Clair County, Illinois. See Technical Support Document for the Final Clean Air Interstate Rule, Air Quality Modeling (March 2005), Document I.D. OAR-2003-0053-2123, at Appendix H. Thus, EPA concluded that Texas would contribute significantly to downwind $PM_{2.5}$ nonattainment in those two Counties. See 70 Fed. Reg. at 25246-49.

C. Petitioners' Interests and Participation in the CAIR Rulemaking

The City of Amarillo is located in the panhandle region of West Texas. It has an interest in CAIR because the rule is likely to result in increased electricity costs for its residents and local businesses. Occidental Permian Ltd. is an upstream oil and gas company that operates thousands of wells in West Texas. It has an interest in CAIR because it is a significant purchaser of electric power in West Texas, and also is likely to face price increases as a result of CAIR. El Paso Electric Company is a public utility that generates, transmits and distributes electricity in an area of 10,000 square miles in West Texas and southern New Mexico. It owns and operates several electric generating facilities in the El Paso, Texas area. Southwestern Public Service Company, d/b/a Xcel Energy is a subsidiary, and the Texas operating company, of Xcel Energy Inc. Xcel Energy generates and supplies electric power for 260,000 customers in West Texas. El Paso Electric Company and Xcel Energy have an interest in CAIR because their West Texas operations will be subject to further regulation under CAIR.

Petitioners participated in the CAIR rulemaking and urged EPA to exclude West Texas from the rule. Specifically, Xcel Energy submitted comments objecting to EPA's inclusion of West Texas in the proposed rule and requesting that EPA perform an appropriate subregional analysis. See Comments of Xcel Energy on the Environmental Protection Agency's Proposed Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Interstate Air Quality Rule)(March 30, 2004), Document I.D. OAR-2003-0053-0720, at section 3; Comments on Availability of Additional Information Supporting the Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule)(August 27, 2004), Document I.D. OAR-2003-0053-1869, at 5-6; Supplemental comments of Xcel Energy regarding the rule to reduce interstate transport of fine particulate matter and ozone (Clean Air Interstate Rule)(January 31, 2005), Document I.D. OAR-2003-0053-1938.[3]

---

[3] Other Petitioners also participated in the rulemaking process through interested groups. See Comments of the National Environmental Development Association's Clean Air Project (March 30, 2004), Document I.D. OAR-2003-0053-0948 (Occidental Permian Ltd.) and Comments of the Edison Electric Institute (March 30, 2004), Document I.D. OAR-2003-0053-0774 (El Paso Electric Company).

D. Definition of "West Texas"

Petitioners urge EPA to exclude from CAIR as "West Texas" all Texas counties that are not part of the "East Texas Region," as that term has been defined by the Texas Commission on Environmental Quality ("TCEQ") at the direction of the Texas Legislature. The Texas Legislature instructed TCEQ to create separate regions of the state for the purpose of issuing air emission permits to electric generating facilities. Specifically, Section 39.264(g) of the Utilities Code provides as follows:

> The conservation commission by rule shall establish an East Texas Region, a West Texas Region, and an El Paso Region for allocation of air contaminants under the permitting program [for electric generating facilities]. The East Texas Region must contain all counties traversed by or east of Interstate Highway 35 or Interstate Highway 37, including Bosque, Coryell, Hood, Parker, Somervell, and Wise counties. The West Texas Region includes all of the counties not contained in the East Texas Region or the El Paso Region. The El Paso Region includes El Paso County.

TCEQ's implementing regulations further refine these regions, providing that the East Texas Region is "[a]ll counties traversed by or east of Interstate Highway 35 north of San Antonio or traversed by or east of Interstate Highway 37 south of San Antonio, and also including Bexar, Bosque, Coryell, Hood, Parker, Somervell, and Wise Counties." 30 T.A.C. §101.330(10). The El Paso Region includes El Paso County. *Id.* at §101.330(13). The West Texas Region consists of "[a]ll counties not contained in the East Texas Region or the El Paso Region." *Id.* at §101.330(19).

II. SUMMARY OF GROUNDS FOR RECONSIDERATION

EPA should reconsider its decision to include the entire State of Texas in CAIR for $PM_{2.5}$ purposes, and instead should exclude West Texas. EPA determined that Texas is subject to $PM_{2.5}$ emission reduction requirements under CAIR based on modeling of the entire State. West Texas, however, has far fewer emissions, is hundreds of miles farther west than any other portion of the CAIR region, and cannot reasonably be regarded as contributing significantly to $PM_{2.5}$ nonattainment in any eastern state. This is evident given that the intervening states, those located between West Texas sources and downwind areas that supposedly are significantly affected, are not subject to CAIR for $PM_{2.5}$. EPA has the authority to treat West Texas differently than the rest of the State, and there is ample precedent for it to do so.

Based on new modeling that examines West Texas separately from the rest of the State, it is clear that regulation of emissions in West Texas under Section 110(a)(2)(D) of the CAA is inappropriate and legally unjustified. In particular, the new modeling demonstrates that the contribution of West Texas sources to $PM_{2.5}$ air quality in the two Illinois counties that EPA has "linked" with Texas is only 0.05 $\mu g/m^3$. Since this is less than one-fourth of the significance

threshold of 0.20 $\mu g/m^3$ adopted by EPA in CAIR, West Texas should be excluded. Especially in the face of this new data, the application of CAIR's $PM_{2.5}$ requirements to West Texas sources is arbitrary, capricious or otherwise not in accordance with law.

III. GROUNDS FOR RECONSIDERATION

A. EPA's Authority to Evaluate Significance of Contribution of Intrastate Areas is Well-Established.

EPA is not required by the CAA to determine significance of contribution, for the purpose of CAIR, on a statewide basis and its authority to do so on an intrastate (or subregional) basis is well-established. Section 110(a)(2)(D)(i) of the CAA requires that a State Implementation Plan prohibit "any source or other type of emissions activity within a State from emitting any air pollutant in amounts which will -- (1) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to a [NAAQS]." 42 U.S.C. §7410(a)(2)(D)(i). This provision, as EPA has acknowledged, neither prescribes nor prohibits a statewide approach to regulating interstate transport of pollutants. See Michigan v. EPA, 213 F.3d 663, 682 (D.C. Cir. 2000) (rejecting EPA's inclusion of the States of Georgia and Missouri in the final NOx SIP Call rule based on "administrative convenience" where only the "fine grid" portions of those states were shown to contribute significantly to nonattainment with the 1-hour ozone NAAQS in downwind jurisdictions and stating that, "[t]he critical issue is whether the targeted 'source' or 'emissions activity' 'contribute[s] significantly to nonattainment' in another state."); EPA's Corrected Response to Significant Public Comments on the Proposed Clean Air Interstate Rule ("Response to Comments"), Document I.D. OAR-2003-0053-2172, at 229 (recognizing that, "EPA is not legally mandated to assess significance of contribution on a statewide basis, and so need not adopt CAIR controls.").

In other rulemakings that pertain to compliance with the NAAQS, EPA has determined applicability of the rule's requirements on a non-statewide basis. For example, in the revised NOx SIP call rule, EPA excluded from the rule's requirements the "coarse grid" portions of the States of Georgia, Missouri, Alabama and Michigan. See Interstate Ozone Transport: Response to Court Decisions on the NOx SIP Call, NOx SIP Call Technical Amendments, and Section 126 Rules, 69 Fed. Reg. 21604 (April 21, 2004). Conversely, EPA's proposal to apply CAIR's $PM_{2.5}$ requirements to New Jersey and Delaware finds that, combined, the two states would contribute significantly to downwind nonattainment, even though the contribution of either state individually would not do so. See Proposed Rule; Inclusion of New Jersey and Delaware in the Clean Air Interstate Rule, 70 Fed. Reg. 25407 (May 12, 2005). Thus, EPA has ample precedent upon which it can rely to depart from the use of state boundaries when establishing SIP obligations under the CAA.

B. Texas is Unique Among CAIR-Regulated States and West Texas Should be Treated Like Other Western States.

With regard to Texas, the statewide basis that EPA employs in CAIR for determining affected regions simply cannot be reconciled with physical reality. The inclusion of

the entire State of Texas in CAIR creates an inexplicable geographic anomaly. The natural western boundary to the CAIR region (running roughly along a north-south line) would include the western boundary of the states whose eastern boundaries are marked by the Mississippi River. This includes the boundary between Texas and Louisiana, thereby excluding Texas from the rule. While it may be rational to include in CAIR the eastern portion of Texas because of its relatively high population and concentration of electric generating units ("EGUs") and other emissions sources, there is no reasonable justification for the inclusion of the vast, distant, sparsely populated and largely barren western portion of the State.

Texas differs significantly from any other state included in CAIR in terms of its size, variation in its eastern and western regions and the number, total emissions and distance of its EGUs from downwind $PM_{2.5}$ nonattainment areas. With respect to size, the State encompasses approximately 261,914 square land miles, is approximately 660 miles wide and at El Paso, its western-most point, lies roughly along the same longitude as Billings, Montana, within the Mountain time zone. The eastern and western regions of Texas differ dramatically, with the majority of East Texas consisting of urbanized, suburbanized or densely forested areas and West Texas consisting of sparsely-populated farms, ranches or desert/scrub lands. The panhandle region in West Texas, geographically, is part of the Great Plains and has far more in common with western Oklahoma and Kansas, and eastern New Mexico and Colorado, than with East Texas. No other state included in CAIR even remotely involves such an expansive area with such distinct regional variations.[4]

Texas also is unique among CAIR-affected states with respect to its electric utility regulatory laws. There are two distinct regulatory zones - Electric Reliability Council of Texas, Inc. ("ERCOT") in the center of the State and Southwestern Power Pool ("SPP") in the western portion of the State. Separation of the State electrically into these two zones precludes significant transmission of power between these two regions, as is discussed in further detail in Section III.F.3 of this Petition.

The regional variations of Texas are reflected in the State's industry and population distribution, with less than one-tenth of all Texans (who total more than 20 million) residing in West Texas and almost all of the State's urban centers located in East Texas, including Houston, Beaumont/Port Arthur, Dallas, Fort Worth, San Antonio, Austin and Corpus Christi. Unlike East Texas, which has far more and highly-concentrated coal-fired EGUs, West Texas has only seven such units, and these units are spread over four counties (Gray, Lamb,

---

[4] Texas is so large that, when it was admitted to the union, Congress authorized it subsequently to subdivide itself into several different states. Specifically, Congress provided that "[n]ew States, of convenient size, not exceeding four in number, in addition to said State of Texas, and having sufficient population, may hereafter, by the consent of said State, be formed out of the territory thereof, which shall be entitled to admission under the provisions of the federal constitution." *Joint Resolution for Annexing Texas to the United States*, Jt. Res. 8, 28th Cong., Sess. II, 5 Stat. 797 (1845).

Potter and Wilbarger Counties) that encompass an area of approximately 3,800 square miles. Not only are these seven western units located relatively distant from one another, but they also are located approximately 1,000 kilometers from the closest downwind $PM_{2.5}$ nonattainment areas, such as the greater Chicago, St. Louis and Indianapolis metropolitan areas. Attachment 2 to this Petition is a map depicting the distance between West Texas EGUs and downwind non-attainment areas, as well as the intervening states not subject to CAIR.[5]

Like other western units, the seven coal-fired EGUs in West Texas also are lower emitting units than similar units in East Texas and elsewhere. The nameplate coal capacity for EGUs in West Texas is less than 15 percent of the total coal capacity for the State, meaning that West Texas sources represent only a small percentage of the State's generating capacity and an even smaller percentage of its coal-fired power plant emissions. In fact, in 2002, the total NOx and SO_2 emissions from West Texas EGUs accounted for only 13.5 percent of all NOx and SO_2 emissions from all EGUs in the State.

By requiring West Texas sources to comply with the CAIR requirements, EPA will impose significant costs upon West Texas power plants, up to as much as $100 million per retrofitted coal-fired EGU, resulting in rate increases for West Texas power customers. These costs simply cannot be justified when the emissions reductions required under CAIR will not achieve any measurable improvement in downwind ambient air quality. West Texas power plants, like those in other western states, should be subject only to regulations that address western air quality issues, such as the Regional Haze Rule and its BART provisions, and not be included in CAIR, which addresses eastern air quality issues that are essentially unaffected by emissions from West Texas sources.

C. Dividing Texas Along the Interstate I-35/37 Corridor under CAIR is a Logical Alternative with Ample Precedent.

There is ample statutory and regulatory precedent for dividing the State into two regions along the Interstate I-35/I-37 corridor for the purposes of CAIR and evaluating the emissions contribution from West Texas sources separately. First, as explained above, the Texas Legislature previously has recognized that West Texas should be treated separately for the purpose of emission control purposes, and has divided the State along the Interstates 35 and 37 divide. Implementing this separate treatment, the regulations of the TCEQ differentiates West Texas along the Interstate corridor. 30 T.A.C. §§101.330(10), (13) and (19). TCEQ also uses the Interstate corridor in its SIP planning activities, focusing most heavily on the eastern portion of the State. See TCEQ's Regional Strategy SIP (April 2000).

Moreover, the Administration's own Clear Skies legislation, which seeks to regulate NOx, SO_2 and mercury emissions from power plants, applies a similar approach,

---

[5] Note that while Arkansas is depicted as subject to the CAIR, this is only for ozone, not for $PM_{2.5}$. Thus, for purposes of analyzing West Texas, Arkansas is not included in CAIR.

separating Texas into eastern and western regions divided by Interstate 35. See *Clear Skies Act of 2005*, Sen. 131, 109th Cong. § 451 (2005)(creating a Zone 1 to include "Texas east of Interstate 35" and a Zone 2 to include "Texas west of Interstate 35."). EPA Assistant Administrator Jeff Holmstead explained the reason for the two separate NOx caps in Clear Skies as follows:

> The Clear Skies Act incorporates two separate NO_x caps, because the nature and magnitude of the environmental problems to which NO_x contributes in the eastern half of the country are different from those in the western half. Significant NO_x reductions are required in the East to protect human health and address serious environmental issues. Less stringent reductions are required in the West, aimed primarily at reducing the effects of regional haze and visibility problems and keeping cleaner air clean during a period of expected population growth. Clear Skies establishes two trading zones for NO_x. Moreover, to ensure that the different air quality goals can be met, there would be no trading between the two zones.

Jeffrey Holmstead, *Clear Skies: A Better Way to Regulate* <http://www.rff.org/rff/News/Coverage/2003/May/Clear-Skies-A-Better-Way-to-Regulate.cfm> (May/June 2003). There is no reason that this rationale should not be applied to CAIR.

Finally, the Texas Legislature recently adopted legislation expressly supporting a division of West Texas from the eastern portion of the State for purposes of CAIR and directing the TCEQ to petition EPA for exclusion of West Texas from CAIR on the basis of this existing demarcation. House Bill 2481 amended the Texas Clean Air Act to add new section 382.0173(f), which provides, in relevant part, as follows:

> The commission shall take all reasonable and appropriate steps to exclude the West Texas Region and the El Paso Region, as defined by Section 39.264(g), Utilities Code, from any requirement under, derived from, or associated with 40 C.F.R. Sections 51.123, 51.124, and 51.125, including filing a petition for reconsideration with the United States Environmental Protection Agency requesting that it amend 40 C.F.R. Sections 51.123, 51.124, and 51.125 to exclude such regions.

Attachment 3 to this Petition is a copy of this new legislation. EPA should defer to the Texas Legislature's confirmation of this corridor as a sound basis for regulating differently these vastly dissimilar regions of the State.

D. Newly-Available Modeling Confirms that West Texas Does Not Contribute Significantly to Downwind Nonattainment.

EPA decided to include Texas in CAIR for $PM_{2.5}$ based solely on its preliminary modeling of emissions from the entire State. As part of that analysis, EPA's modeling "zeroed out" all of the anthropogenic NOx and SO_2 emissions from the State to determine the resulting impact on downwind areas. In their comments on the proposed rule, Petitioners urged EPA to examine the downwind impacts from sources in West Texas separately from those in the rest of the State. Petitioners explained that further subregional analysis was needed to confirm that West Texas sources would not have a significant downwind impact. The final rule, however, does not reflect any $PM_{2.5}$ subregional analysis for West Texas sources and, like the proposed rule, continues to include the entire State of Texas.

Following publication of the final rule in May 2005, Petitioners retained Alpine to undertake subregional $PM_{2.5}$ modeling for Texas. Alpine first obtained from EPA the relevant modeling data sets for CAIR. Alpine next performed an annual 2010 Base Case simulation to demonstrate, by corroborating EPA's model, that its systems were operating properly. Then, Alpine divided Texas into West Texas and East Texas along the Interstate I-35/37 corridor and performed "zero-out" modeling for each sub-region. Attachment 4 to this Petition is the report of the modeling and its results prepared by Alpine.[6]

The subregional modeling shows that by eliminating all anthropogenic emissions in West Texas, the 2010 $PM_{2.5}$ concentrations in Madison and St. Clair Counties would improve by only 0.05 $\mu g/m^3$ in each County. Because this is far below EPA's applicability threshold of 0.20 $\mu g/m^3$, the data demonstrates that, using EPA's own methods and data, West Texas does not contribute significantly to nonattainment in those Counties. Accordingly, West Texas should be excluded from CAIR.

E. Having Properly Excluded Kansas, Oklahoma and Arkansas from CAIR for $PM_{2.5}$, it is Arbitrary and Capricious to Include West Texas.

As noted above, EPA determined that Texas contributed significantly to downwind $PM_{2.5}$ nonattainment only in Madison County and St. Clair County, Illinois, just east of St. Louis, Missouri. The States of Kansas, Oklahoma and Arkansas fall in a line between Texas and the two Illinois Counties, meaning that emissions from Texas must travel over at least one of these three States in order to reach the Counties. However, EPA concluded that none of these States contributes significantly to $PM_{2.5}$ nonattainment in the two Illinois Counties. This determination might be sustained with regard to East Texas because of its relatively high concentration of emission sources in the eastern portion of Texas. It cannot be sustained with regard to West Texas.

---

[6] The report was prepared quickly due to time constraints, and so Petitioners reserve the right to submit a revised or follow-up report.

The density of anthropogenic emissions from West Texas are less than those in Kansas, Oklahoma or Arkansas. EPA's emissions inventories show that West Texas has far fewer tons of NOx and SO_2 emissions per square kilometer (ton/sq. km) than Oklahoma, Kansas or Arkansas. The densities of NOx emissions in Oklahoma, Kansas and Arkansas are 1.85, 1.46 and 1.78 ton/sq. km, respectively, but only 0.98 ton/sq. km in West Texas. Similarly, the densities of SO_2 emissions in Oklahoma, Kansas and Arkansas are 0.89, 0.51 and 1.39 ton/sq. km, respectively, but only 0.43 ton/sq. km in West Texas.[7] This is reflected in the generally greater number of coal-fired EGUs in Oklahoma (12), Kansas (16) and Arkansas (5) than in West Texas (7). Moreover, the sources from these three States obviously are considerably closer to the two Illinois Counties than are the sources in West Texas. Under these circumstances, the simultaneous exclusion of Kansas, Oklahoma and Arkansas from CAIR's $PM_{2.5}$ requirements, and inclusion of West Texas, is arbitrary.

The results of the refined modeling corroborate that including West Texas while excluding Kansas, Oklahoma and Arkansas is irrational. As noted above, the maximum contributions of West Texas to $PM_{2.5}$ in each of the two Illinois Counties is 0.05 $\mu g/m^3$. According to EPA's own zero-out modeling, the maximum contributions from Kansas, Oklahoma and Arkansas were 0.11 $\mu g/m^3$, 0.12 $\mu g/m^3$, and 0.19 $\mu g/m^3$, respectively. 70 Fed. Reg. at 25247, Table VI-7. Moreover, EPA identified the locations of the maximum downwind contributions for the three States as Madison County (Kansas and Oklahoma) and St. Clair County (Arkansas). 69 Fed. Reg. at 6908, Table V-5. Thus, EPA included West Texas sources even though their contribution is not only below the EPA threshold for "significance," but is less than half of the contribution of each of the three intervening States that are closer to the same Illinois receptors.

F. EPA's Justifications for Refusing to Analyze West Texas Separately are Groundless.

1. EPA's Strict Adherence to State Boundaries for CAIR in the Case of Texas is Arbitrary.

EPA defends its modeling of the entire State of Texas on the grounds that "state boundaries are a natural demarcation point, since they reflect an autonomous political entity." See Response to Comments at 229. For purposes of analyzing and reducing long-range pollutant transport, however, it is evident that state boundaries are irrelevant and that what truly matters are emissions, meteorology and distance. EPA has long recognized this fundamental fact, and did so in the CAIR rule itself when it combined Maryland with the District of Columbia as a single region for purposes of the rule. EPA justified that combination as "a logical approach because of the small size of the District of Columbia and, hence, its emissions and its close

---

[7] Emission densities are based on areas for Oklahoma, Kansas, Arkansas and West Texas (split by grid cell from East Texas) of 177,847, 211,900, 134,856 and 418,154 sq. km. respectively, and EPA's 2010 CAIR emissions inventory. See Clean Air Interstate Rule Emissions Inventory Technical Support Document, Document I.D. OAR-2003-0053-2047, at Appendix H.

proximity to Maryland." 70 Fed. Reg. at 25247 and n. 103. For similar reasons, EPA has proposed to combine New Jersey and Delaware for purposes of $PM_{2.5}$ CAIR. 70 Fed. Reg. 25408 (May 12, 2005). If EPA can ignore the state boundaries between these areas based on emissions and geography, it can recognize the Texas interstate corridor based on the same factors.

In particular, EPA's refusal to analyze West Texas separately, while simultaneously proposing to combine New Jersey and Delaware, is irreconcilable. EPA's modeling shows that emissions from each of these States, when considered individually, do not contribute significantly to downwind nonattainment, *i.e.*, the maximum downwind $PM_{2.5}$ improvement from "zeroing out" the anthropogenic emissions of each State separately is less than 0.20 $\mu g/m^3$. 70 Fed. Reg. at 25247, Table VI-7. When combined, however, the States' emissions contribute significantly. *Id.* EPA explained the basis for its proposal to treat the two States as one as follows:

> We are proposing to . . . treat Delaware and New Jersey as special cases and as a single geographic area, because of their relatively small size (and correspondingly lower total emissions), because of the relatively high emissions density of these States, because we believe doing so will achieve a result that is more in keeping with the intention of section 110(a)(2)(D), and because doing so will ensure that a State located between an upwind State that significantly contributes to nonattainment in a downwind State, carries its appropriate emission reduction obligation mandated by section 110(a)(2)(D).

70 Fed. Reg. at 25412. The division of Texas into two separate regions for purposes of CAIR is justified by essentially the same considerations. Texas is extremely large, West Texas has a low emission density, and including West Texas in CAIR ensures that upwind and downwind areas supposedly linked by a "significant contribution" are separated by large states that supposedly do not contribute significantly. It is irrational for EPA to combine two states under CAIR based on certain factors while refusing to bifurcate another based on the very same factors.

In a similar vein, EPA asserts that the "SIP process is statewide" and notes that Section 110(a)(2)(D) prohibits emissions from states from interfering with downwind nonattainment. See Response to Comments at 229. *Id.* This is true only in a sense irrelevant to whether West Texas should be treated differently. Although the administrative process for developing and approving SIPs is statewide, the substantive, emission control aspects of SIPs frequently, perhaps typically, are not. Most states, including Texas, develop and implement quite different control strategies for attainment areas and nonattainment areas, and also for different nonattainment areas. For instance, the Texas SIP regulates certain types of sources in Houston far more heavily than the same types of sources in Amarillo. Likewise, Section 110(a)(2)(D) in no way suggests that all of a state's regions be treated as one. That provision imposes an obligation on each state (as the responsible political entity) to include in its SIP

provisions prohibiting "any source or type of emissions activity within the State" from contributing significantly to downwind nonattainment. 42 U.S.C. §7410(a)(2)(D).

2. Dividing Texas Along the Interstate I-35/37 Corridor under CAIR is Not Arbitrary.

EPA also justifies its refusal to separately analyze West Texas because the Agency sees no logical alternative without "elements of arbitrariness." See Response to Comments at 229. The division along the Interstate I-35/I-37 corridor, however is a logical and previously-used demarcation that is anything but arbitrary. Based on differences in population, land use, industry concentration, emission density and other factors, the corridor reflects a logical division of the State into two sectors for air quality management purposes. As noted above, the Texas Legislature and the TCEQ have recognized the need to separate East and West Texas in this way for the purpose of emissions reductions and other requirements. Moreover, the Legislature has expressly provided that West Texas and East Texas should be treated separately under CAIR. Finally, the Administration itself has recognized this same demarcation in its Clear Skies proposal. Thus, it is EPA's inflexible insistence on using the State's boundary under these highly unusual circumstances that is arbitrary.

3. EPA's Concern About Creating a Pollution Haven in West Texas is Unfounded.

EPA also has expressed concern that exclusion of West Texas from CAIR's requirements would encourage diversion of generating capacity from East Texas to CAIR-excluded units in West Texas and routing of electric power back to East Texas, circumventing CAIR's emissions reduction requirements and creating an "in-state pollution haven." See Response to Comments at 230-31. But EPA recognized in the CAIR rulemaking that this is a highly fact-specific determination. EPA stated that "[s]uch shifting [of emissions to a "pollution haven"] may not always occur, because of physical factors in the electrical transmission and distribution system, economic factors, or other regulatory requirements may prevent it." 70 Fed. Reg. at 25413, n. 8.

This is precisely the case in Texas. All seven coal-fired EGUs in West Texas are part of the SPP. Almost all of the coal-fired EGUs in East Texas, however, are part of ERCOT. SPP and ERCOT are connected in the West by a single DC tie that already is at or near capacity. This capacity constraint would preclude SPP plants from selling any additional power into ERCOT without first installing additional DC transmission capacity and interties. Such additional capacity would require a substantial, and likely cost-prohibitive, infrastructure investment, as well as regulatory authorizations from the Public Utilities Commission of Texas and other entities. For these reasons, it is simply implausible to conclude that exclusion of West Texas EGUs from CAIR would encourage a shift in generating capacity from East to West Texas. Thus, EPA's concern with potential "leakage" is misplaced and does not provide a reasonable basis for including West Texas in CAIR.

Further, EPA's concern does not justify its refusal to analyze West Texas separately from the rest of the State. SPP covers not just part of West Texas, but also Kansas, Oklahoma and Arkansas. Even if, hypothetically, leakage were a realistic scenario, it would be just as likely to occur with regard to these other States within the SPP as between SPP and ERCOT. EPA has not considered this a sufficient basis for subjecting any of those states, however, to CAIR's $PM_{2.5}$ requirements. Nor has EPA examined the potential, under this theory, that pollution havens would be created in other states along the western boundary of the CAIR region. To do so solely with respect to West Texas sources constitutes merely a *post hoc* rationalization, and is arbitrary.

IV. CONCLUSION

For the foregoing reasons, Petitioners urge EPA to reconsider its inclusion of West Texas sources in CAIR and to exclude those sources from the $PM_{2.5}$ requirements of the rule.

Respectfully submitted,

William M. Bumpers
Renu K. Gupta
Baker Botts, L.L.P.
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
(202) 639-7700

Counsel for Petitioners

Dated: July 11, 2005