BEFORE THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In re:	§	
	§	EPA Docket No.
Federal Implementation Plans: Interstate	§	
Transport of Fine Particulate Matter and	§	EPA-HQ-OAR-2009-0491
Ozone and Correction of SIP Approvals,	§	
76 Fed. Reg. 48,208 (Aug. 8, 2011)	§	

PETITION FOR RECONSIDERATION AND STAY

Pursuant to 5 U.S.C. § 705 and 42 U.S.C. § 7607(d)(7)(B), the State of Texas, by and through its Attorney General, and on behalf of the Texas Commission on Environmental Quality ("TCEQ"), the Public Utility Commission of Texas, the Railroad Commission of Texas, the Texas Department of Agriculture, and the Texas General Land Office ("Texas," collectively) request reconsideration and an immediate stay of the above-referenced rule (the "Final Rule") as it applies to Texas.

INTRODUCTION

During the notice-and-comment period, TCEQ and several private parties commented on the proposed version of the Final Rule based on the limited Texas-relevant information that was available at the time. When the Final Rule was promulgated, Texas was surprised, and dismayed, to discover that the previously disclosed information on which TCEQ commented was no longer relevant and that the Final Rule would have a significant impact on Texas in ways that could not possibly have been foreseen during the notice-and-comment period.

Texas now provides the following comments and urges EPA to grant a reconsideration proceeding and a stay of the Final Rule's effective date and compliance deadlines as they apply to Texas. As explained below, failure to do so would not only violate the notice requirements of both the Administrative Procedure Act, 5 U.S.C. § 551-59 ("APA") and the Clean Air Act, 42 U.S.C. § 7401-7700 ("CAA"), but it would also allow a rule that violates substantive provisions of the CAA to remain on the books. In light of the Final Rule's significant flaws and the pronounced detrimental effects that its implementation will have, the Administrator should grant this request for reconsideration and an immediate stay of the rule as it applies to Texas.

BACKGROUND

I. Statutory Framework

The CAA requires the United States Environmental Protection Agency ("EPA") "to issue national ambient air quality standards ('NAAQS') for each air pollutant that 'cause[s] or contribute[s] to air pollution which may reasonably be anticipated to endanger public health or welfare [and] the presence of which in the ambient air results from numerous or diverse mobile or stationary sources.'" *North Carolina v. EPA*, 531 F.3d 896, 901 (D.C. Cir. 2008) (quoting 42 U.S.C. § 7408(a)(1)(A), (B)). Once EPA establishes NAAQS, the CAA requires EPA, after consultation

with the States, to designate areas as "nonattainment," "attainment," or "unclassifiable." 42 U.S.C. § 7407(c), (d).

The statute provides States with important rights and responsibilities with respect to EPA's actions. After the issuance of NAAQS, States are required to develop state implementation plans ("SIPs") to meet them. *Id.* § 7410(a)(1). Generally speaking, States enjoy wide latitude when determining how areas within their borders will attain and maintain NAAQS. *Train v. Natural Res. Defense Council, Inc.*, 421 U.S. 60, 86-87 (1975); *see Union Elec. Co. v. EPA*, 427 U.S. 246, 269 (1976) (explaining that "Congress plainly left with the states, so long as the [NAAQS] were met, the power to determine which sources would be burdened by regulation and to what extent").[1]

Of particular relevance to this proceeding is the CAA's "good neighbor" provision, 42 U.S.C. § 7410(a)(2)(D)(i)(I). Under that provision, States are required to "prohibit[] . . . any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will . . . contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any . . . national primary or secondary ambient air quality standard." *Id.*

II. The Proposed and Final Versions of the Rule

In early August 2010, EPA published the "Clean Air Transport Rule," the proposed rule on which the Final Rule is based. Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, Proposed Rule, 75 Fed. Reg. 45,210 (Aug. 2, 2010) (the "Proposed Rule"). The Proposed Rule announced EPA's intent to issue federal implementation plans ("FIPs") that would "limit the interstate transport of emissions of nitrogen oxides (NO_X) and sulfur dioxide (SO_2) . . . within 32 states in the eastern United States that affect the ability of downwind states to attain and maintain compliance with the 1997 and 2006 fine particulate matter ($PM_{2.5}$) . . . NAAQS and the 1997 ozone NAAQS." *Id.* at 45,210; *see also* Luminant's Petition for Reconsideration and Stay at 8-10, Docket No. EPA-HQ-OAR-2009-0491 (Aug. 5, 2011) ("Luminant PFR") (providing a more detailed account of the Proposed Rule).[2]

Significantly, the Proposed Rule did not include the State of Texas among the "25 jurisdictions that contribute significantly to nonattainment in, or interfere with maintenance by, a downwind area with respect to the 24-hour $PM_{2.5}$ NAAQS promulgated in September 2006." Proposed Rule, 75 Fed. Reg. at 45,215. Nor was Texas included among the "24 jurisdictions that contribute significantly to nonattainment in, or interfere with maintenance by, a downwind area with

---

1. TCEQ (formerly the Texas Natural Resource Conservation Commission) has primary responsibility for implementing and overseeing Texas's CAA obligations, including compliance with the requirement to implement, maintain, and enforce NAAQS through SIPs. *See generally* TEX. HEALTH & SAFETY CODE ch. 382; *id.* § 382.0173(a).

2. To avoid repetition of information that has already been presented to EPA, Texas incorporates the cited portions of other parties' filings by reference.

respect to the annual $PM_{2.5}$ NAAQS promulgated in July 1997." *Id.* The Proposed Rule announced an intent to require Texas to reduce only its "ozone season NO_X emissions . . . that contribute significantly to nonattainment in, or interfere with maintenance by, a downwind area with respect to the 1997 ozone NAAQS promulgated in July 1997." *Id.*

The Final Rule, however, is very different from the Proposed Rule. Instead of targeting only ozone-season NO_X emissions for Texas, as the Proposed Rule had done, the Final Rule also targets annual NO_X emissions, as well as SO_2 emissions. The Final Rule does so based on EPA's finding—made for the first time in the Final Rule—that Texas contributes significantly to downwind nonattainment with respect to the 1997 Annual $PM_{2.5}$ NAAQS. Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 Fed. Reg. 48,208, 48,213-14 (Aug. 8, 2011) (the "Final Rule"). It also establishes a FIP for ozone and annual $PM_{2.5}$ only and specifies emission budgets for Texas for annual SO_2, annual NO_X, and ozone-season NO_X, *id.* at 48,262-63 (Tables VI.D-3, VI.D-4), requiring Texas electric generating units ("EGUs") to comply with specific emission allocations beginning January 1, 2012, *id.* at 48,211—less than five months after the Final Rule was published in the Federal Register. *Id.* at 48,208 (published August 8, 2011).

The inclusion of Texas in the Final Rule is based on modeling, which EPA presented for the first time in the Final Rule, predicting that Texas will, in 2012, contribute significantly to $PM_{2.5}$ nonattainment at a single air-pollution monitoring site: the Granite City site in Madison County, Illinois. *Id.* at 48,213, 48,240 (Tables V.D-1, V.D-2, V.D-3, V.D-4). EPA concluded that, because its model of Texas's annual $PM_{2.5}$ contribution (0.18 $\mu g/m^3$, *see id.* at 48,240 (Table V.D-1)) predicts exceedance of the relevant significance threshold (0.15 $\mu g/m^3$, *id.* at 48,236), Texas should be required to reduce the emissions that would purportedly lead to this modeled contribution.[3]

This was true even though, as already noted, the Proposed Rule had not found Texas to be contributing significantly to either the annual or 24-hour $PM_{2.5}$ standard. Proposed Rule, 75 Fed. Reg. at 45,215; *see id.* at 45,255, 45,261 (Tables IV.C-13, IV.C-16) (listing Texas's largest contribution to downwind annual $PM_{2.5}$ nonattainment as 0.13 $\mu g/m^3$, to downwind annual $PM_{2.5}$ maintenance-interference as 0.06 $\mu g/m^3$, to downwind 24-hour $PM_{2.5}$ nonattainment as 0.21 $\mu g/m^3$, and to downwind 24-hour $PM_{2.5}$ maintenance-interference as 0.28 $\mu g/m^3$). Indeed, the Proposed Rule had called for comment on whether Texas should be included in the Final Rule on just one basis: the prospect that exclusion of Texas from the Final Rule's scope would reduce the price to Texas EGUs of high-sulfur coal, which in turn could cause the EGUs that purchased and burned that coal to begin contributing significantly to downwind nonattainment and maintenance-interference in other States. *Id.* at 45,284. TCEQ and others provided comments critical of that proposed basis for including Texas, and EPA ultimately abandoned it, choosing to include Texas in the Final Rule based on new modeling significantly linking Texas to the Granite City monitor.

---

3. EPA specifies in the Final Rule that it is not adopting a FIP for Texas with respect to the 24-hour $PM_{2.5}$ NAAQS. *See id.* at 48,214. But EPA also clearly acknowledges, in setting Texas's emissions budgets, that those budgets will address significant contributions for the 24-hour $PM_{2.5}$ NAAQS. *See id.*

And although that modeling suggested, to EPA, that Texas would just barely exceed the relevant significance threshold (by 0.03 $\mu g/m^3$ for annual $PM_{2.5}$ contribution, *see* Final Rule, 76 Fed. Reg. at 48,240-242 (Tables V.D-1, V.D-4)), the Final Rule's previously undisclosed emissions budgets for Texas mandated substantial reductions in both annual NO_X and SO_2. *Id.* at 48,269. As noted below, the required reductions for Texas were more onerous than those for other States whose significant contributions to downwind nonattainment and maintenance-interference far exceeded Texas's modeled contributions.

REASONS TO CONVENE A RECONSIDERATION PROCEEDING AND GRANT A STAY

Under the CAA, EPA's Administrator has no choice but to reconsider the Final Rule. The statute directs that the Administrator "shall convene a proceeding for reconsideration" if two showings are made: *first*, that it was either impracticable to raise the relevant objection during the comment period or the grounds for such objection arose after the period for public comment (but within the time specified for judicial review), and *second*, that the objection is of central relevance to the outcome of the rule. 42 U.S.C. § 7607(d)(7)(B). Each of those elements is satisfied here.

On the first point, the Final Rule is so fundamentally different from the Proposed Rule, and predicated on such fundamentally different grounds than the Proposed Rule, that it could not possibly be viewed as a logical outgrowth of the Proposed Rule. *See infra* Part I; *see also* Luminant PFR at 4-5 (quoting the Office of Management and Budget's ("OMB's") report on interagency review, which noted that the Final Rule was a "significantly different rule than originally proposed," Summary of Interagency Working Comments on Draft Language under EO 12866 Interagency Review ("OMB Summary of Interagency Working Comments"), Document EPAHQ-OAR-2009-0491-4133 at 11 (posted July 11, 2011)). Although TCEQ provided some comments during the public-comment period and in response to EPA's Notices of Data Availability ("NODAs"), neither it nor any other party could have provided comment on the core elements of the Final Rule as it relates to Texas because those elements were not disclosed until the Final Rule was promulgated.

On the second point, the objections raised in this petition are of central relevance to the outcome of the rule because they reflect the Final Rule's legal invalidity on multiple grounds. For that reason, the Administrator must "convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed." 42 U.S.C. § 7607(d)(7)(B).

I. Texas did not have adequate notice or a meaningful opportunity to comment.

A. The law on notice is well-settled and, if EPA does not grant reconsideration, Texas's lack of notice will be a basis for vacating the Final Rule on judicial review.

In "afford[ing] interested parties a reasonable opportunity to participate in the rulemaking process," *Am. Radio Relay League, Inc. v. FCC*, 524 F.3d 227, 236 (D.C. Cir. 2008) (internal quotation mark omitted), adequate notice is fundamental to sound administrative decision-making. The notice requirement is "designed (1) to ensure that agency regulations are tested via exposure to diverse public comment, (2) to ensure fairness to affected parties, and (3) to give affected parties an opportunity to develop evidence in the record to support their objections to the rule and thereby enhance the quality of judicial review." *Int'l Union, United Mine Workers of Am. v. Mine Safety & Health Admin.*, 407 F.3d 1250, 1259 (D.C. Cir. 2005) (citing *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 547 (D.C. Cir. 1983)).

Here, two statutes required EPA to provide Texas and other interested parties adequate notice of the rule and its underlying support. The APA required EPA to publish, in the Federal Register, a notice of proposed rulemaking that included "either the terms or substance of the proposed rule or a description of the subjects and issues involved." 5 U.S.C. § 553(b)(3). And the CAA required EPA to take the additional, and more detailed, step of providing a statement of the Proposed Rule's basis and purpose that included "a summary of—(A) the factual data on which the proposed rule [wa]s based; (B) the methodology used in obtaining the data and in analyzing the data; and (C) the major legal interpretations and policy considerations underlying the proposed rule." 42 U.S.C. § 7607(d)(3); *see Small Refiner*, 705 F.2d at 518-19 (discussing the requirements of CAA section 7606(d)(3)).

As the D.C. Circuit has frequently explained, a proposed rule and a final rule may permissibly differ "only insofar as the latter is a 'logical outgrowth' of the former." *Envtl. Integrity Project v. EPA*, 425 F.3d 992, 996 (D.C. Cir. 2005) (citing *Shell Oil Co. v. EPA*, 950 F.2d 741, 750-51 (D.C. Cir. 1991)), and a final rule is a "logical outgrowth" of a proposed rule only if interested parties "'should have anticipated' that the change was possible, and thus reasonably should have filed their comments on the subject during the notice-and-comment period." *Ne. Md. Waste Disposal Auth. v. EPA*, 358 F.3d 936, 952 (D.C. Cir. 2004) (quoting *City of Waukesha v. EPA*, 320 F.3d 228, 245 (D.C. Cir. 2003)). Stated differently, "a final rule will be deemed the logical outgrowth of the proposed rule if a new round of notice and comment would not provide commentators with their first occasion to offer new and different criticisms which the agency might find convincing." *Fertilizer Inst. v. EPA*, 935 F.2d 1303, 1311 (D.C. Cir. 1991) (internal quotation marks omitted).

In light of these requirements, notice is adequate only if it allows interested parties a chance to provide "meaningful" comments, and comments can be meaningful only if parties are made aware of what, specifically, they need to comment on. *See Gerber v. Norton*, 294 F.3d 173, 179 (D.C. Cir.

2003) (finding no meaningful opportunity to comment on a permit that was linked to the mitigation value of an undefined mitigation site); *see also Small Refiner*, 705 F.2d at 518-19, 548 (discussing "Congress' intent, expressed in [CAA] § 307(d), that EPA provide a detailed proposal for interested parties to focus their comments on"). "If the APA's notice requirements mean anything, they require that a reasonable commenter must be able to trust an agency's representations about which particular aspects of its proposal are open for consideration." *Envtl. Integrity Project*, 425 F.3d at 998 (citing *Fertilizer Inst.*, 935 F.2d at 1312).

Adequate notice is particularly important when an agency relies on scientific studies or data in support of a final rule. As the D.C. Circuit has explained, "[i]ntegral to the notice requirement is the agency's duty 'to identify and make available technical studies and data that it has employed in reaching the decisions to propose particular rules . . . . An agency commits serious procedural error when it fails to reveal portions of the technical basis for a proposed rule in time to allow for meaningful commentary.'" *Solite Corp. v. EPA*, 952 F.2d 473, 484 (D.C. Cir. 1991) (quoting *Conn. Light & Power Co. v. NRC*, 673 F.2d 525, 530-31 (D.C. Cir. 1982)); *see Sierra Club v. Costle*, 657 F.2d 298, 334, 397-98 & n.484 (D.C. Cir. 1981) (describing public notice and comment regarding relied-upon technical analysis as "safety valves in the use of . . . sophisticated methodology").

Along these same lines, the D.C. Circuit has explained that "[i]t is not consonant with the purpose of a rule-making proceeding to promulgate rules on the basis of inadequate data, or on data that, [to a] critical degree, is known only to the agency." *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 393 (D.C. Cir. 1973). For that reason, post-comment publication of the key methodology underlying a rule cannot provide adequate notice where that methodology is an integral part of the agency's model. *Owner-Operator Indep. Drivers Ass'n v. Fed. Motor Carrier Safety Admin.*, 494 F.3d 188, 201-02 (D.C. Cir. 2007); *see Weyerhaeuser Co. v. Costle*, 590 F.2d 1011, 1030-31 (D.C. Cir. 1978).

Generally, an agency must *itself* satisfy the notice requirement, rather than rely on third parties' comments on a rule to do so indirectly. *Small Refiner*, 705 F.2d at 549 (explaining that "the EPA must itself provide notice of a regulatory proposal. Having failed to do so, it cannot bootstrap notice from a comment."); *see McLouth Steel Prods. Corp. v. Thomas*, 838 F.2d 1317, 1323 (D.C. Cir. 1988). In *Small Refiner*, the court recognized that a contrary rule "would turn notice into an elaborate treasure hunt, in which interested parties . . . must search the record for the buried treasure of a possibly relevant comment." 705 F.2d at 550; *see, e.g., AFL-CIO v. Donovan*, 757 F.2d 330, 340 (D.C. Cir. 1985).

Under the CAA, a notice violation will result in a rule's reversal so long as there is "a substantial likelihood that the rule would have been significantly changed if [the complained-of] errors had not been made." 42 U.S.C. § 7607(d)(8); *Small Refiner*, 705 F.2d at 521-24, 543-44 & n.102, 550. And "failure to observe the basic APA procedures, if reversible error under the APA, is reversible error under the [CAA] as well." *Small Refiner*, 705 F.2d at 523. Challengers must present "enough to show that on remand they can mount a credible challenge to the amended rule and were thus prejudiced by the absence of an opportunity to do so before the amendment." *Util.*

Solid Waste Activities Group v. EPA, 236 F.3d 749, 755 (D.C. Cir. 2001); *but see also McLouth*, 838 F.2d at 1324 (noting that requiring a showing of prejudice "is normally inappropriate where the agency has completely failed to comply with [APA] § 553").

As shown below, EPA failed to comply with both APA section § 553(b) and CAA section § 7607(d)(3) with respect to Texas's inclusion in the Final Rule. EPA should grant reconsideration and a stay to save the rule from vacatur on this basis. *See, e.g., Envtl. Integrity Project*, 425 F.3d at 998; *Int'l Union*, 407 F.3d at 1261.

B. The lack of notice prevented Texas from providing comments that would have significantly changed the Final Rule.

1. Because the Proposed Rule gave Texas no notice that it would be significantly linked to a $PM_{2.5}$ monitor for nonattainment, Texas had no opportunity to identify the errors underlying its linkage, in the Final Rule, to the Granite City monitor.

As already noted, the Proposed Rule did not identify any Texas linkage to nonattainment or maintenance-interference monitors for $PM_{2.5}$, nor was Texas included in the proposed $PM_{2.5}$ FIP. *See* Proposed Rule, 75 Fed. Reg. at 45,632-33. In the Proposed Rule, EPA provided estimated interstate contributions to annual $PM_{2.5}$, 24-hour $PM_{2.5}$, and 8-hour ozone nonattainment and maintenance-interference for each of 37 states. *Id.* at 45,255 (Table IV.C-13). Texas's largest downwind contribution to nonattainment for annual $PM_{2.5}$ was 0.13 $\mu g/m^3$. These downwind contributions were calculated for each State with respect to each of the 32 monitoring sites that were projected to reflect nonattainment status and each of the 16 sites projected to reflect maintenance problems for the annual $PM_{2.5}$ NAAQS in the 2012 base case. *Id.* at 45,255. Because Texas's largest downwind contribution did not exceed EPA's 0.15 $\mu g/m^3$ significance threshold, *see id.* (Table IV.C-13), the Proposed Rule did not significantly link Texas to any annual $PM_{2.5}$ monitor receptor, and Texas was therefore not required to make any emissions reductions to meet the annual $PM_{2.5}$ NAAQS. *See id.* at 45,216 (Table III.A-1).

It was impossible and impractical, based on the limited information provided through the Proposed Rule, for the State to comment on the potential significant contribution of Texas for the annual $PM_{2.5}$ NAAQS. This is especially true in light of the different monitor-receptor projections regarding future nonattainment, maintenance-interference, or both and the photochemical modeling that appeared in the Final Rule but was never previously made available for public review and comment. *Compare, e.g.*, Proposed Rule, 75 Fed. Reg. at 45,246-251, *and id.* at 45,253-260 *with* Final Rule, 76 Fed. Reg. at 48,233-244. The Final Rule's scientific and technical underpinnings were so vastly different in both nature and scope that Texas could not have "guessed" that it would be modeled to contribute significantly with respect to any downwind area, much less for any particular NAAQS. In short, it was impossible for TCEQ or any other party to comment on the particular $PM_{2.5}$ monitor to which Texas was significantly linked in the Final Rule because that

monitor was not identified, in the Proposed Rule, as a nonattainment monitor that Texas might significantly affect.

Had Texas been aware of this linkage, it would have submitted comments addressing problems with the Granite City monitor, as another commenter has now done. *See* Luminant PFR at 16-19. That monitor is inappropriate for at least two reasons. First, it is currently in attainment of the annual $PM_{2.5}$ NAAQS. *See* Approval and Promulgation of Air Quality Implementation Plans; Illinois; Missouri; Saint Louis Nonattainment Area; Determination of Attainment of the 1997 Annual Fine Particle Standard, 76 Fed. Reg. 29652 (May 23, 2011). Second, the Granite City monitor is heavily influenced by local conditions— specifically, the close proximity of a steel mill, which is the proximate cause of any past exceedances of the $PM_{2.5}$ NAAQS. *See id.* at 29,653 ("EPA agrees that Madison County, Illinois monitors have generally recorded the highest ambient $PM_{2.5}$ concentrations in the Saint Louis area. In addition to monitor 17-119-1007, area high values have been recorded at monitor 17-119-0024. Both monitors are in Granite City near [the steel mill].").

In determining that the Granite City monitor was an appropriate nonattainment receptor, EPA ignored air-quality data from a federally approved regulatory monitor and, indeed, its own recent acknowledgment that this area is in attainment of the annual $PM_{2.5}$ NAAQS. Despite its language in the notice determining that this area is in attainment, *id.* (stating that "[m]onitored attainment of the standard is the only basis of a determination of attainment or nonattainment, and it is the only relevant issue"), EPA is ignoring monitored air-quality data in favor of a hypothetical modeling exercise to determine potential nonattainment receptors that do not fully consider current relevant conditions and air-quality controls. *See* Final Rule, 76 Fed. Reg. at 48,233-235 (explaining EPA's revised air-quality modeling). Texas could not have commented on this situation at the proposed-rule stage, as EPA did not propose to significantly link Texas to this particular monitor.[4] Further, EPA's final acknowledgment of attainment for the area in which this monitor is found was only published May 23, 2011, so TCEQ would not have had that information available to it at the time the Proposed Rule was published.

In neither its proposed or final determination of attainment notice for the St. Louis nonattainment area (in which the Granite City monitor is located) does EPA mention transport as a potential reason for either past or future nonattainment or for maintenance issues at the monitor. *See* Approval and Promulgation of Air Quality Plans; Illinois; Missouri; Saint Louis Nonattainment Area; Determination of Attainment of the Fine Particle Standard, Proposed Rule, 76 Fed. Reg. 12,302 (March 7, 2011); Approval and Promulgation of Air Quality Plans; Illinois; Missouri; Saint Louis Nonattainment Area; Determination of Attainment of the Fine Particle Standard, 76 Fed. Reg. 29,652 (May 23, 2011). This is in contrast to another recent EPA notice recommending that Baton

4. EPA provided a list of modeled linkages for all States analyzed in the Proposed Rule in its Air Quality Modeling Technical Support Document, but Texas was below the linkage threshold for both annual and 24-hour $PM_{2.5}$, and therefore no monitor was identified in the Proposal Rule for Texas to analyze and comment on. In the Final Rule, EPA made significant revisions to its modeling, *see* 76 Fed. Reg. at 48,253, and determined that Texas was significantly linked to the Madison County monitor (monitor number 171191007) for both 24-hour and annual $PM_{2.5}$.

Rouge, Louisiana be redesignated to attainment of the 1997 eight-hour ozone standard. *See* Approval and Promulgation of Implementation Plans and Designation of Areas for Air Quality Planning Purposes; Louisiana; Baton Rouge Ozone Nonattainment Area: Redesignation to Attainment for the 1997 8-Hour Ozone Standard, 76 Fed. Reg. 53,853 (August 30, 2011). That notice contained a specific discussion of the reductions required by the Clean Air Interstate Rule ("CAIR"), and projected to be required by the Final Rule, and the role of those reductions in ensuring that Baton Rouge reached and will maintain the ozone standard. *Id.* at 53,868. Therefore, even if Texas had been able to divine EPA's intent to further investigate the Granite City monitor, it would not have had notice that EPA considered transport from Texas to be significantly contributing to the Granite City monitor. It is unreasonable that Texas is being required to make drastic emissions reductions for the purported purpose of ensuring that this monitor will attain the annual $PM_{2.5}$ standard.

Furthermore, EPA's use of the Granite City monitor as a nonattainment receptor for an upwind state is unreasonable on its face, due to heavy influence from its close proximity to a sizable steel mill. The steel mill ceased operation in 2008, and the monitor has since monitored attainment for both annual and 24-hour $PM_{2.5}$. *See* Saint Louis Determination of Attainment, 76 Fed. Reg. at 29,654. Although the mill resumed operations in 2010, its emissions are greatly reduced under a Memorandum of Understanding with the Illinois Environmental Protection Agency designed to prevent future attainment issues. "Assessment of Local-Scale Emissions Inventory Development by State and Local Agencies," Sonoma Technology, Inc. (October 2010), *available at* http://www.epa.gov/ttn/chief/local_scale/sti_epa_local_scale_ei_final_report.pdf, and appx. B, "Presentations by State and Local Agencies to the Local-Scale Emissions Focus Group," 89-127, *available at* http://www.epa.gov/ttn/chief/local_scale/sti_epa_local_scale_ei_final_report_appendices.pdf; "United States Steel Corporation Granite City Works and IEPA Memorandum of Understanding," signed July 1, 2010.

The Final Rule also provides a precedent to consider the effects of local controls in calculations of upwind States' significant contributions to this monitor. But EPA applies the consideration of local contribution in the Final Rule arbitrarily. A monitor in Allegheny County, Pennsylvania, is located downwind from a large coking unit. Final Rule, 76 Fed. Reg. at 48, 247, n.40. The Allegheny County monitor is located approximately the same distance from the coking unit as the Granite City monitor is to the steel mill. Even though the Allegheny County monitor continued to show maintenance issues after the $2,300/ton reductions were applied, EPA did not increase the cost threshold to require emissions reductions from any upwind State, due to the heavy local influence on the Allegheny County monitor.[5] Similarly, States linked to the Granite City monitor should not be shifted to a new cost threshold (in this case, from $0.00 to $500.00/ton) and

5. Final Rule, 76 Fed. Reg. at 48,259. EPA stated: "It is well-established that, in addition to being impacted by regional sources, the Liberty-Clairton area is significantly affected by local emissions from a sizable coke production facility and other nearby sources, leading to high concentrations of organic carbon in this area. EPA finds that the remaining $PM_{2.5}$ nonattainment problem is predominantly local and therefore does not believe that it would be appropriate to establish a higher cost threshold solely on the basis of this projected ongoing nonattainment of the 24-hour $PM_{2.5}$ standard at the Liberty-Clairton receptor." *Id.*

required to reduce emissions due to the heavy local influence on the Granite City monitor. EPA provides no rationale for why the Granite City monitor is treated differently from the Allegheny County monitor.

Had the EPA considered more recent monitoring data at the Granite City monitor (which would incorporate the effects of local, non-CAIR controls on this primarily locally influenced monitor), it would have found that the monitor was in attainment and would continue to be in attainment without the Final Rule's controls. At a minimum, had EPA still chosen to include this monitor as a nonattainment receptor, by considering local influences at the monitor, it should have selected a cost threshold lower than $500/ton when calculating significant contribution.

Therefore, the use of a modeled linkage showing a significant contribution between Texas and the Granite City monitor is unreasonable and was not supported in the Final Rule by any rational reason. EPA should reconsider the appropriateness of the Granite City monitor for use in evaluating upwind significant contributions because it is actually demonstrating attainment through air-quality monitor data and the monitor is heavily influenced by the local steel mill. Additionally, even if the Madison County monitor were an appropriate receptor for consideration, EPA should reconsider the appropriate cost threshold for evaluating significant contribution and required emissions reductions.

If, as EPA has acknowledged in its determination of attainment for the St. Louis area, St. Louis will remain in attainment without any emissions reductions from Texas, then Texas cannot possibly be significantly contributing to nonattainment or maintenance-interference for this monitor. For these reasons alone, Texas was denied the reasonable opportunity to participate in the rulemaking process that the APA, the CAA, and the case law requires. *See supra* Part I.A. But as explained below, that is by no means the extent of the problem.

2. The Proposed Rule failed to provide adequate notice of key factual data and EPA's methodology, both of which the State would have challenged during the notice and comment period.

In the Proposed Rule, EPA noted that it was proposing a two-step approach to identify which States were significantly contributing to downwind nonattainment and maintenance-interference. Proposed Rule, 75 Fed. Reg. at 45,233-34. The first step was to utilize air-quality modeling to quantify individual state contributions to downwind nonattainment and maintenance-interference sites in 2012. *Id.* States whose contributions to any downwind site exceeded one percent of the relevant NAAQS were considered "linked" to the site. *Id.* In the second step, EPA identified the portion of each State's contribution that was considered "significant." *Id.* For this step, EPA used maximum cost thresholds with additional information from what it called "air quality considerations." *Id.* Basically, EPA determined what reductions were available from EGUs in an individual upwind State at a particular maximum cost threshold and required all of those emission reductions to be made without regard to what was actually required to eliminate a State's significant contribution to the downwind monitor receptor. *Id.* at 45,270-284. Therefore, the determination of the downwind monitor receptor sites was a critical factor in EPA's analysis and, as such, a crucial

piece of information for a State to evaluate when gauging the possibility that it would significantly impact a particular monitor.

EPA first identified "all monitors projected to be in nonattainment, or based on historic variability in air quality, projected to have maintenance problems in 2012." *Id.* at 45,233.[6] The question this endeavor was to answer—whether any particular monitor was appropriately projected to be in nonattainment or have maintenance problems in 2012—was of obvious and critical importance to any State eventually found to be significantly contributing to another State's air pollution.

EPA reflected its own understanding of the importance of information regarding monitor linkages and the timely dissemination of that information to the States by providing six other States supplemental notice and an opportunity to comment on monitor linkages that either were not included in the Proposed Rule or were altered in the Final Rule. Federal Implementation Plans for Iowa, Kansas, Michigan, Missouri, Oklahoma, and Wisconsin to Reduce Interstate Transport of Ozone, Proposed Rule, 76 Fed. Reg. 40,662 (July 11, 2011). Inexplicably, however, EPA failed to provide Texas with supplemental notice and the ability to comment on its purported significant linkage for nonattainment of the annual $PM_{2.5}$ standard to the Granite City monitor, which was likewise not disclosed in the Proposed Rule.

6. To do so, EPA considered all emissions reductions associated with the implementation of all federal rules promulgated by December 2008 and assumed that CAIR, a previous rule with a purpose similar to that of the Final Rule, had no effect. *Id.*; *see North Carolina*, 531 F.3d at 930 (vacating CAIR); *but see also North Carolina v. EPA*, 550 F.3d 1176, 1178 (D.C. Cir. 2008) (per curiam opinion on rehearing remanding the case to EPA without vacating CAIR).

Specifically, Iowa, Kansas[7], Michigan[8], Missouri, Oklahoma[9] and Wisconsin were all found to have new ozone linkages in the Final Rule and were therefore given a chance to comment. Final Rule, 76 Fed. Reg. at 48,244-246. Yet Texas, which the Proposed Rule did not significantly link to any monitors for $PM_{2.5}$, was afforded no opportunity for notice and comment regarding its significant contribution to any nonattainment receptor for $PM_{2.5}$. Additionally, and as already noted, the monitor on which EPA based its significant-contribution finding for Texas in the Final Rule is currently in *attainment* status. *See* Saint Louis Determination of Attainment, 76 Fed. Reg. at 29,652-53 (acknowledging that the Saint Louis $PM_{2.5}$ nonattainment area in Illinois and Missouri has attained the 1997 annual $PM_{2.5}$ NAAQS and that "[m]onitored attainment of the standard is the only basis of a determination of attainment or nonattainment, and it is the only relevant issue"); *see* Luminant PFR at 16-19. Had this link been identified in the Proposed Rule, Texas would have commented on several flaws in EPA's assumptions regarding the monitor and the propriety of its inclusion as a receptor. *See supra* Part I.B.1.

3. EPA's sole request for comment regarding Texas was misleading.

In the Proposed Rule, EPA not only failed to provide notice of key information regarding Texas's inclusion in the Final Rule, but it also asked for comments on what ultimately proved to be a non-issue. Whether intentionally so or not, this request was misleading, and it yielded comments from TCEQ and others that EPA later admitted were "no longer relevant." Transport Rule Primary Response to Comments at 562, Document No. EPA-HQ-OAR-2009-0491-4513 (June 2011); *see* Luminant PFR at 12-14.

At the rule-proposal stage, EPA requested comment on the potential inclusion of Texas with respect to $PM_{2.5}$ emissions—a request premised on the idea that the Final Rule would lead EGUs in

---

7. Kansas was included in the ozone program at the proposed-rule stage (and thus provided a preliminary budget for review and comment) due to a linkage to Dallas County, TX (481130069), Proposed Rule, 75 Fed. Reg. at 45,269-270 (Tables IV.C.20, IV.C-21), that was subsequently dropped as a projected maintenance monitor in the Final Rule. Kansas was linked in the Final Rule to a new monitor (Allegan, MI (260050003)). Final Rule, 76 Fed. Reg. at 48,246 (Tables V.D.8, V.D-9).

8. Michigan was included in the ozone program at the proposed-rule stage (and thus provided a preliminary budget for review and comment) due to a linkage to Suffolk, NY (361030009). Proposed Rule, 75 Fed. Reg. at 45,269 (Table IV.C-20). The Suffolk monitor was dropped as a projected nonattainment monitor in the Final Rule, but Michigan was linked to a new monitor (Harford, MD (240251001)). Final Rule, 76 Fed. Reg. at 48,246 (Tables V.D.8, V.D-9).

9. Oklahoma was included in the ozone program at the proposed-rule stage (and thus provided a preliminary budget for review and comment) due to a linkage to a Tarrant County, TX nonattainment monitor (484391002), and to Dallas and Tarrant County, TX, maintenance monitors (481130069, 481130087, 484392003), Proposed Rule, 75 Fed. Reg. at 45,269-270 (Tables IV.C-20, IV.C-21), all of which were subsequently dropped as nonattainment and/or maintenance monitors in the Final Rule. Oklahoma was linked in the Final Rule to a new monitor (Allegan, MI (260050003)). Final Rule, 76 Fed. Reg. at 48,246 (Tables V.D.8, V.D-9).

covered jurisdictions to buy more low-sulfur coal, which in turn would decrease the demand for (and price of) higher-sulfur coal that Texas EGUs might then begin to buy and burn in quantities sufficient to yield significant emissions contributions in downwind States. Proposed Rule, 75 Fed. Reg. at 45,284. EPA's proposal predicted SO_2 emission increases of more than 5,000 tons for Texas and four other States. But because EPA's projected significance threshold was exceeded only for Texas, EPA requested comment only on the potential inclusion of Texas for this purpose. *Id.* (stating that "[f]urther analysis with the air quality assessment tool indicates that these projected increases in the Texas SO_2 emissions would increase Texas's contribution to an amount that would exceed the 0.15 $\mu g/m^3$ threshold for annual $PM_{2.5}$. For this reason, EPA takes comment on whether Texas should be included as a group 2 state.").[10]

EPA did not, however, identify any nonattainment or maintenance monitor as a potential receptor that could be affected by the anticipated increased use of high-sulfur coal. And because it requested comment only on the potential inclusion of Texas due to increased SO_2 emissions, specifically due to fuel switching, Texas could not reasonably have been expected to provide comments based on inclusion for any one of innumerable possibilities that were *not* proposed.

4. Because the Proposed Rule did not include emissions budgets for Texas, Texas had no opportunity to comment on the effects the Final Rule would have and identify problems that EPA should have considered.

The Final Rule's core premise is that the covered States must reduce their total emissions of NO_X and SO_2 to ensure that they do not contribute significantly to air pollution in downwind States. Final Rule, 76 Fed. Reg. at 48,209. To accomplish that goal, the rule sets emissions budgets that States may not exceed. *Id.* at 48,210. As already noted, EPA's data did not show Texas contributing significantly to any out-of-state monitor, so EPA did not propose emission budgets for Texas for annual NO_X or annual SO_2. Proposed Rule, 75 Fed. Reg. at 45,291 (Table IV.E-1); *id.* at 45,294-95 (Tables IV.F-1, 2); *see also* Luminant PFR at 14-16.

Because EPA did not propose emissions budgets for Texas, neither TCEQ nor any other party could comment on potential emissions-reduction requirements for Texas or other related issues. In the Final Rule, EPA suggests that it was unnecessary to provide illustrative budgets for States because EPA provided a proposed methodology for budget calculation that should be considered sufficient (suggesting that Texas should have calculated its own budget). Final Rule, 76 Fed. Reg. at 48,214. It is unclear, however, why Texas alone should have had to provide this independent assessment in order to understand and assess the impacts of the rule on the State and its EGUs.

---

10. TCEQ and several other parties commented, in response to this request, on the infeasibility for many Texas EGUs to switch to higher-sulfur coals, making it improbable that Texas SO_2 emissions would increase significantly because of fuel-switching if Texas were not included in the Final Rule. *See, e.g.*, Comment submitted by Mark R. Vickery, Executive Director, Tex. Comm'n on Envtl. Quality, Document No. EPA-HQ-OAR-2009-0491-2857 (posted Oct. 7, 2010) (commenting on the Proposed Rule); *see also* Luminant PFR at 12-14.

Again, this problem was unique to Texas; no other State covered by the Final Rule was denied proposed budgets.

The absence of emissions budgets for Texas frustrated the purpose of the notice requirement. Without a proposed budget, Texas did not have, and could not have had, an opportunity to comment on a part of the rule that directly affects its interests. The budgets are the key limitation that the rule imposes, and as such are integral to the purported purpose of prohibiting interstate transport of regulated pollutants. Because it had no opportunity to examine the budgets that eventually appeared for the first time in the Final Rule, Texas was unable to adequately comment on the potential effects of the Final Rule on the State.

The lack of emissions budgets for Texas in the Proposed Rule was particularly problematic because it deprived the State of any opportunity to comment on the cost-benefit analysis that determines if a State should be included in a rule of this nature. Proposed Rule, 75 Fed. Reg. at 45,270-285. The central question of what costs EGUs would actually have to incur to meet EPA's budgets could not be answered without knowing what the budgets were. And the lack of that information caused specific harm because EPA's own cost-benefit analysis did not specifically evaluate Texas. Moreover, in the Final Rule, EPA made an erroneous determination that Texas EGUs could make the required emissions reductions at a cost of only $500/ton of SO_2. *See* Final Rule, 76 Fed. Reg. at 48,251-252, 48,257-259.

That determination was based on several incorrect facts and analytical mistakes. For instance, in projecting power-industry compliance in 2012, EPA assumed (1) year-round operation of existing controls; (2) operation of scrubbers that are currently scheduled to come on-line by 2012; (3) some fuel-switching to lower-sulfur coal; and (4) changes in dispatch and generation shifting from higher-emitting units to lower-emitting units. *Id.* at 48,279-48,281. Had it received adequate notice of its inclusion for annual $PM_{2.5}$, Texas would have offered comment on these assumptions' specific inapplicability in Texas. *See* Elec. Reliability Council of Tex., Inc., Impacts of the Cross-State Air Pollution Rule on the ERCOT System, at 3-6 (Sept. 1, 2011) ("ERCOT Report," attached hereto as Ex. A and incorporated by reference herein); Luminant PFR at 27-35.

EPA's errors are significant, and its own analysis belies its assertion that Texas will be able to meet the Final Rule's budgets. EPA states that, for Texas and other "Group 2" States, *see* Final Rule, 76 Fed. Reg. at 48,214, the costs to meet the emissions budgets for SO_2 are capped at $500/ton for 2012 and will remain constant. *Id.* at 48,251-252. But EPA also states that the costs necessary to meet budgets may escalate in 2014, given the emissions limits imposed upon "Group 1" states. EPA illustrates this in Table VI.B-3 of the Final Rule. *Id.* at 48,252 -253. This table shows that, to meet a budget of 243,000 tons of SO_2 emissions in 2014, Texas EGUs will have to expend $10,000/ton. And because the $10,000/ton figure is the highest cost level that EPA examined, this may well be an underestimate. Indeed, in light of EPA's numerous mistakes regarding Texas's ability to meet the budget it announced in the Final Rule, the $10,000/ton figure is possibly a very large underestimation. Nevertheless, costs of $10,000/ton to meet the SO_2 emissions limits in 2014

are unreasonable, and Texas should have been allowed a chance to explain why that was so during the notice-and-comment period.

EPA's own analysis also reveals the flaw in its prediction that Texas will be able to meet its 2013 emissions budget. Although EPA updated its lignite-usage information for Texas to reflect that fewer cost-effective emissions reductions would be available, *id.* at 48,284, it failed to account for this change in Texas's SO_2 budget. *Id.* at 48,269. Even if EPA maintains that this discrepancy does not interfere with Texas's ability to comply with the Final Rule because Texas's emissions would still fall below Texas's assurance level (287,866 tons for 2012, 2013, 2014 and beyond, *id.* at 48,269), that conclusion is flawed. A presumption that Texas must rely on allowances purchased from out-of-state sources in order to comply with the Final Rule improperly disregards rule-compliance costs and highlights the inadequacy of Texas's budget. Not only did EPA fail to consider the possibility that the required volume of allowances would be unavailable for purchase within the limited pool of Group 2 States, *see* ERCOT Report at 6, it also did not analyze this as a compliance option available at the $500/ton cost threshold. 76 Fed. Reg. at 48,279-281.[11]

Were Texas to have attempted its own analysis and guessed at a relationship between the control cost thresholds and a potential state budget, it could only have assumed that its SO_2 budget would have been set at around 293,000 to 295,000 tons. This would have been the only plausible assumption based on the EPA's data, which did not specify a cost threshold for Group 2 states, but rather indicated that some amount below $2000/ton was appropriate, with some States' budgets reflecting thresholds as low as $200/ton. Proposed Rule, 75 Fed. Reg. at 45,272, 45,281-282. The lack of a proposed cost-threshold for Texas EGUs would have further hampered any attempt by Texas to calculate a possible SO_2 budget. Operating on such inadequate information, a budget estimate at this level might have been approximately 50,000 tons higher than the SO_2 budget for Texas that was unveiled in the Final Rule.

The lack of a proposed SO_2 budget, combined with the lack of clarity regarding the appropriate cost threshold for Group 2 States and the incorrect base-case data, would have rendered any potential calculation by Texas regarding its SO_2 budget meaningless. Had the EPA provided a proposed budget to Texas, Texas would at least have had the same opportunities for budget review and comment that all other States covered by the Final Rule were provided. And that required notice

---

11. *See also* Transport Rule Remedy Sensitivity Analysis: Cost-Effectiveness of Texas Emission Reductions, Environmental Protection Agency, Document No. EPA-HQ-OAR-2009-0491-4474 (posted July 12, 2011) (EPA emission projections considering revised lignite sensitivity analysis discussed in the Final Rule). If each of the States made exactly the reductions predicted by the EPA to be available to them at a $500/ton cost threshold (the threshold used by EPA for 2012 reductions), Texas's SO_2 emissions after those reductions (based on the lignite sensitivity) were 280,000 tons, and all available Group 2 allowances were sold *only* to Texas, Texas would still be short 23,894 allowances. Failure to hold 23,894 allowances to cover emissions (which are still within Texas's overall assurance limit) would result in a forfeiture by whichever EGUs were unable to secure those allowances from the following year's budget of 47,788 allowances. *See* 76 Fed. Reg. at 48,294-298. Further, were this 23,894-ton exceedance over available allowances to occur, it could result in civil penalties of up to $327,049,125,000 for just one control period (23,894 tons x 365 days in a control period x $37,500) and the potential for criminal penalties as well. *See* 42 U.S.C. § 7413(a)(3).

would have allowed Texas to assess possible emissions reductions and their anticipated ripple effects, such as impacts on electric reliability. *See infra* Part IV. As it stands, EPA has failed to acknowledge or account for the negative impacts of this rule on electrical generation in the State and the far-reaching effects it could have on Texas citizens. *Id.*

II. The Final Rule violates the CAA by setting emissions budgets for Texas that greatly exceed what would be required to eliminate Texas's purported significant contribution.

As another commenter has already noted, EPA's modeling reflects that Texas's alleged 0.18 $\mu g/m^3$ SO_2 contribution to downwind nonattainment for annual $PM_{2.5}$, *see* Final Rule, 76 Fed. Reg. at 48,240 (Table V.D-1), just barely exceeds the 0.15 $\mu g/m^3$ significance threshold, *id.* at 48,236, and is well below the alleged significant contributions of many other States. *See* Luminant PFR at 19-22 and Exhibit 7. Yet the Final Rule requires Texas to make the second largest reduction in 2012 SO_2 emissions. *See id.*; Final Rule, 76 Fed. Reg. at 48,269. This conspicuous disparity between Texas's alleged significant contribution and its required emissions reductions violates the CAA.

As the D.C. Circuit explained in *North Carolina*, EPA "is 'a creature of statute,' and has 'only those authorities conferred upon it by Congress'; 'if there is no statute conferring authority, a federal agency has none.'" 531 F.3d at 922 (quoting *Michigan v. EPA*, 268 F.3d 1075, 1081 (D.C. Cir. 2001)). As already noted, the CAA gives EPA authority to require States to "prohibit[] . . . any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will . . . contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any . . . national primary or secondary ambient air quality standard." 42 U.S.C. § 7410(a)(2)(D)(i)(I). Neither this statutory provision nor any other, however, gives EPA authority to go further and require States to prohibit emissions below the significant-contribution threshold.

North Carolina speaks clearly on this point. There, the Court explained that, even though EPA's "redistributional instinct may be laudatory," section 7410(a)(2)(D)(i)(I) gives the agency "no authority to force an upwind state to share the burden of reducing other upwind states' emissions. Each state must eliminate its own significant contribution to downwind pollution. While [an EPA rule] should achieve something measurable towards that goal, it may not require some states to exceed the mark." 531 F.3d at 921. The Court confirmed that its previous decision in *Michigan* does not permit EPA to "just pick a cost for a region, and deem 'significant' any emissions that sources can eliminate more cheaply," explaining that "[s]uch an approach would not necessarily achieve something measurable toward the goal of prohibiting sources 'within the State' from contributing significantly to downwind nonattainment." *Id.* at 918 (quoting 42 U.S.C. § 7410(a)(2)(D)(i)(I)); *see also id.* at 919-20 (explaining that EPA "may not trespass beyond the bounds of its statutory authority by taking other factors into account than those to which Congress limited it, nor substitute new goals in place of the statutory objectives without explaining how doing so comports with the statute" (internal quotation marks and brackets omitted)).

As with the other matters addressed in Part I, Texas had no opportunity to comment on the severe disconnect between its minimal alleged downwind contribution at the Granite City monitor and the significantly disproportionate amount of emissions reductions the Final Rule requires of it. As already noted, EPA's modeling reflected that Texas did not significantly affect any monitor for purposes of the $PM_{2.5}$ NAAQS. But EPA significantly revised the modeling after issuance of the Proposed Rule, ultimately determining, in the Final Rule, that emissions from Texas exceeded the significance threshold. Final Rule, 76 Fed. Reg. at 48,240, 48242. The amount of that alleged overage, however, was minimal—a mere 1.05% of the 24-hour $PM_{2.5}$ standard and 1.2% of the annual $PM_{2.5}$ NAAQS standard. Yet the Final Rule requires a reduction of over 40% of Texas's total SO_2 emissions (as evidenced by Texas's emissions budget, which is more than 40% less than Texas's 2012 base case emission inventory for SO_2). *Id.* at 48305, 48269.

EPA has offered no explanation for this disparity, and it is difficult to see how any explanation could comport with *North Carolina*. EPA's only rationalization for the Final Rule's amount of reductions in Texas is based on cost-effectiveness. *Id.* at 48,246-264. But the D.C. Circuit has specifically foreclosed reliance on that rationale in this type of scenario. *North Carolina*, 531 F.3d at 918-21.[12]

Even if Texas could have reasonably guessed at a possible emissions budget, it could not have commented on the lack of a rational connection between the required emissions reductions and its purported significant contribution identified in the Final Rule because, as already noted, the Proposed Rule did not significantly link Texas to any downwind receptor monitors. And it would have been odd indeed for Texas to expect a significant-contribution linkage to the Granite City monitor, given that this monitor is currently monitoring $PM_{2.5}$ attainment. *See* Approval and Promulgation of Air Quality Implementation Plans; Illinois; Missouri; Saint Louis Nonattainment Area; Determination of Attainment of the 1997 Annual Fine Particulate Standard, 76 Fed. Reg. at 29,652 (May 23, 2011). It is difficult to see how EPA could rationally require *any* reductions based on data from a monitor showing attainment, much less reductions of over 40% of Texas's total SO_2 emissions.

III. The EPA should grant an administrative stay pending appellate review that postpones the Final Rule's effective date and compliance deadlines as they pertain to Texas.

Texas requests a partial administrative stay, postponing the Final Rule's effective date and compliance deadlines as they pertain to Texas and EGUs within the State. This stay would operate for a three-month period during agency reconsideration of the Final Rule, and/or for the entire period in which there is a pending application for judicial review, whichever is longer.

Authority for granting a stay derives from both the CAA, 42 U.S.C. § 7607(d)(7)(B), and the APA, 5 U.S.C. § 705. Under either provision, EPA has broad discretion to delay the effective date

12. Moreover, EPA's cost-effectiveness analysis is flawed in several respects, *see supra* Part I.B.4, and EPA has not identified a scientific basis for a specific amount of reductions that would correspond to Texas's purported significant contribution to nonattainment at the Granite City monitor.

of a rule, based on the specific facts and circumstances before it. *Cf., e.g.*, Industrial, Commercial, and Institutional Boilers and Process Heaters and Commercial and Industrial Solid Waste Incineration Units, 76 Fed. Reg. 28,662, 28,663 (May 18, 2011). Section 7607(d)(7)(B) authorizes EPA to postpone a rule's effectiveness for three months if a reconsideration proceeding is convened. It is apparent that EPA considers the three-month limitation to apply only to the agency's plenary authority to grant a stay without notice and comment. *See* Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR): Aggregation, 74 Fed. Reg. 22,693, 22,694 (May 14, 2009).

APA section 705 authorizes EPA to postpone the effectiveness of a rule pending judicial review when justice so requires. *See* 5 U.S.C. § 705. Section 705's general provisions applicable to federal agencies are not subject to the CAA's more specific provision applicable to the EPA. *See* 42 U.S.C. § 7607(d)(1) (stating that CAA section 7607(d) replaces sections 553-557 of the APA (except as otherwise provided in section 7607(d)), but not stating that it replaces APA section 705). Moreover, when needed, the EPA has used APA section 705 to continue the effect of a stay initially issued under CAA section 7607(d)(7)(B). *Cf.* NESHAP Radionuclide, 55 Fed. Reg. 10,455, 10,456 (Mar. 21, 1990).

A. Texas is entitled to a stay under CAA section 7607(d)(7)(B).

Beyond the requirement that a reconsideration proceeding be convened, CAA section 7607(d)(7)(B) imposes no other requirement for granting a three-month stay pending reconsideration. *Cf., e.g.*, National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants, 76 Fed. Reg. 28,318, 28,326 (May 17, 2011) (stating that stay was not appropriate under section 7607(d)(7)(B) because petitions for reconsideration were denied). No particular test or standard for evaluating a stay request is given. Nevertheless, past requests for stay submitted to the EPA reveal several considerations that may be taken into account in ruling on a stay request.

The EPA has considered whether a stay will provide sufficient time to reconsider an agency action or rule. *See, e.g.*, National Emission Standards for Hazardous Air Pollutants for Source Categories: Gasoline Distribution (Stage 1), 60 Fed. Reg. 62,991, 62,991 (Dec. 8, 1995). The EPA has also considered whether a stay will prevent "undue hardship" and "possible harm" to the requestor during reconsideration. *See, e.g.*, Standards of Performance for Petroleum Refineries,73 Fed. Reg. 55,751, 55,752 (Sept. 26, 2008). Other considerations include: (1) "potential negative effects" on an industry, *see* National Emission Standards for Hazardous Air Pollutants, 56 Fed. Reg. 10,523, 10,523 (Mar. 13, 1991); (2) adverse economic consequences to the requestor such as substantial costs and business disruption, *see* Protection of Stratospheric Ozone, 60 Fed. Reg. 24,676, 24,678 (May 9, 1995); National Emissions Standards for Hazardous Air Pollutants, 57 Fed. Reg. 56,877, 56,878 (Dec. 1, 1992); and (3) potential environmental impacts, *see* Protection of Stratospheric Ozone, 60 Fed. Reg. 24,676, 24,678 (May 9, 1995).

Assuming Texas's request for reconsideration is granted, the facts and circumstances pertaining to Texas and Texas EGUs warrant at least a temporary stay of three months under CAA section 7607(d)(7)(B). To begin, given that the Final Rule's provisions applicable to Texas were first introduced in the Final Rule, represented a significant change from the Proposed Rule, and Texas had no opportunity to comment on these new requirements in the Final Rule, reconsideration will likely take considerable time and not conclude before the Final Rule's scheduled effective date.

Without a stay in place during reconsideration, Texas and its EGUs will experience significant harms. For one thing, without a stay, Texas EGUs will be required to take costly steps in order to attain compliance before reconsideration is likely concluded. These compliance efforts will require major investment by Texas EGUs, which may not be recoverable if reconsideration leads to significant revisions or abrogation of the rule as to Texas. *See* Luminant PFR at 33-36. Such unrecoverable costs could lead to dire economic consequences for Texas EGUs. Besides EGUs, the State of Texas and its citizens would also experience avoidable economic hardship. Absent a stay, if the Final Rule forces "EGUs in Texas . . . to cut production or shutdown in a matter of months," Texas can expect a potential "loss of jobs, loss of tax revenue, and collateral economic consequences, all of which will damage the small, rural communities that rely almost exclusively on . . . mines and plants for their economic livelihood." *Id.* at 34.

Making matters worse, without a stay, the Electric Reliability Council of Texas ("ERCOT") forecasts that the Final Rule's requirements applicable to Texas and the Final Rule's truncated implementation deadlines will have a profound negative impact on Texas EGU operations, which will, in turn, cause foreseeable near- and long-term adverse impacts to the ERCOT-system grid in the form of rotating outages of customer load, *i.e.*, rolling blackouts. *See* ERCOT Report at 4-7. Rotating power outages and the attendant destablization of the power-delivery system to residential, industrial, and commercial users has the potential to severely disrupt the Texas economy and inflict human suffering throughout the State.

All of these harms far outweigh the minuscule effect that the fine particulate-matter emanating from Texas currently has on air quality in other States. As already noted, the Final Rule's Texas provisions were imposed based solely on predicted emissions that Texas EGUs will contribute to nonattainment of the annual and daily $PM_{2.5}$ NAAQS in 2012 at a single monitor in Madison County, Illinois (the Granite City monitor), which already shows air-quality attainment. Final Rule, 76 Fed. Reg. 48,208, 48,223 (Aug. 8, 2011). The amount attributed to Texas currently is only 0.03 $\mu g/m^3$ above the significance level of 0.15 $\mu g/m^3$. *Id.* at 48,240. Issuing a temporary stay of the Texas provisions at this time will not cause any significant adverse environmental impacts or harm to the public at large. It will also not threaten the ability of the Granite City monitor to attain and maintain the annual $PM_{2.5}$ NAAQS, given that the monitor is, as already noted, in attainment status.

Weighing all of these factors, a stay under CAA section 7607(d)(7)(B) to preserve the status quo during EPA reconsideration of the Final Rule, as to Texas and EGUs within the State, is well justified.

B. Texas is entitled to a stay under APA section 705.

As already mentioned, APA section 705 grants the EPA authority to stay an agency order or final determination pending judicial review of such order or determination if the EPA finds "that justice so requires." 5 U.S.C. § 705. Section 705 also provides that a reviewing court may grant a stay pending appeal "to the extent necessary to prevent irreparable harm." *Id.* Beyond these requirements, section 705 specifies no further criteria to guide agencies in determining whether to grant a stay of an agency decision pending appeal.

At least one federal agency has looked to the Federal Rules of Appellate Procedure for additional guidance regarding the criteria that courts and agencies should use in determining whether to impose a stay of an agency decision. The Federal Election Commission has observed that Federal Rule of Appellate Procedure 18 permits a person to apply to the court of appeals in which a petition for direct review of an agency order or decision is pending for a stay of that order or decision. *See* Compliance Procedures, 50 Fed. Reg. 21,077, 21,079 (May 22, 1985). Rule 18, however, requires that, in most instances, application for a stay first be made to the administrative agency, as provided by 5 U.S.C. § 705. 50 Fed. Reg. at 21,079. In addition, FEC has noted that the advisory committee notes to Rule 18 state that the rule "merely assimilates the procedure for obtaining stays in agency proceedings with that for obtaining stays in appeals from the district courts." 50 Fed. Reg. at 21,079. Thus, according to the FEC, because an administrative agency is analogous to a district court in the situation where a stay is sought pending appellate review, the standard applied by the district courts in determining, in the first instance, if such a stay should be granted should likewise be applied by the administrative agency when confronted with the same issue. *Id.*

That standard is the familiar four-part test applied by federal courts in determining whether a stay or any other type of injunctive relief ought to be imposed pending a judicial action. Under that test, the petitioner must show that: (1) he or she will suffer irreparable injury in the absence of such a stay; and, if so, that (2) he or she has made a strong showing of the likelihood of success on the merits of the judicial action; (3) that such relief is consistent with the public interest; and (4) that no other party's interests will be substantially harmed by the stay. *Id.* (citing *Wash. Metro. Area Transit v. Holiday Tours, Inc.*, 559 F.2d 841, 842-43 (D.C. Cir. 1977); *Va. Petrol. Jobbers Ass'n v. Fed. Power Comm'n*, 259 F.2d 921, 925 (D.C. Cir. 1958)); *accord Special Counsel v. Campbell*, 58 M.S.P.B. 455, 457 (1993) (stating that whether a stay should issue under 5 U.S.C. § 705 depends on analysis under four-part test).

The Federal Energy Regulatory Commission takes a somewhat similar approach to that of FEC. FERC focuses on only two factors in determining whether to grant a stay pending appeal under APA section 705. Ceiling Prices; Old Gas Pricing Structure, 51 Fed. Reg. 27,529, 27,530 (Aug. 1, 1986); Regulation of Natural Gas Pipelines After Partial Decontrol, 50 Fed. Reg. 49,370, 49,370-71 (Dec. 2, 1985). FERC asks whether (1) implementation of the regulations will cause imminent, irreparable harm to the petitioner, and (2) staying the effectiveness of a regulation is in the public interest. 51 Fed. Reg. at 27,530; 50 Fed. Reg. at 49,370-71.

By contrast, EPA has shunned any test beyond simply section 705's "as justice so requires" standard. *See* EPA's Memorandum in Opposition to Sierra' Club's Motion for Summary Judgment and in Support of EPA's Cross-Motion for Summary Judgment 13-14, *in* No. 1:11-cv-01278-PLF, *Sierra Club v. Jackson* (Document 20, filed Aug. 25, 2011). EPA apparently believes that applying additional factors besides the "as justice so requires" standard is contrary "to the very language of the statute":

> Section 705 specifically provides a different standard: an agency may postpone the effective date of an agency action "when an agency finds that justice so requires." That Congress chose, in the second sentence of section 705, to make irreparable injury a predicate for a court's grant – presumably over an agency's objection – of a judicial stay in fact indicates that neither irreparable injury nor any other portion of the traditional judicial standard for granting preliminary relief is a predicate to an agency's own exercise of discretion under section 705: A reviewing court may postpone the effective date of agency action "only to the extent necessary to prevent irreparable injury": while an agency may do so when the agency finds that "justice so requires." By using different language, Congress established that the standards governing stays to be issued by the agencies and the courts are different. Further, the D.C. Circuit has articulated the standard for an agency's exercise of its authority under section 705 consistent with the text of the statutory provision, without referencing the factors [from the four-part test].

Id. at 13-14 (citing *Recording Indus. Ass'n of Am. v. Copyright Royalty Tribunal*, 662 F.2d 1, 14 (D.C. Cir. 1981)). Indeed, EPA has expressly disclaimed the four-part test in considering a request for stay pending appeal. *Id.* at 13 n.9. And EPA considers that its decision whether to stay the effective date of a Final Rule pending appeal need only be reasonable in light of the circumstances presented by the stay request. *See id.* at 14-15.

Thus, in determining a stay request pending appeal, EPA's sole focus has been section 705's "as justice so requires" standard. *Id.* at 14. Despite the inherently subjective nature of this inquiry, EPA has indicated that a stay may be appropriate when (1) an insufficient opportunity for public comment was given on certain revisions that EPA made to proposed rules, (2) data was received before rules were finalized that the EPA was unable to incorporate into the final rules, and (3) many facilities across multiple diverse industries might need to begin making major compliance investments in light of impending compliance deadlines, and those investments may not be reversible if the standards are in fact revised following reconsideration and full evaluation of all relevant data. *Id.* at 14. These elements—as well as the more stringent judicial-stay requirements noted above—are satisfied here.

1. Justice requires that the EPA grant Texas's stay request.

In light of the EPA's stated position on section 705 stays, Texas's requested stay should be granted for the following reasons. First, as explained above, Texas was not afforded adequate notice

or a meaningful opportunity to comment on the Final Rule, and the lack of adequate notice prevented Texas from providing comments that would have significantly changed the Final Rule. *See supra* Part I.

Even more, the Final Rule will require Texas EGUs to make major compliance investments in light of the rule's impending deadlines. Five months to make the changes required by this rule is *per se* unreasonable, and EPA has provided no analysis or rational reason for how or why these reductions are to be made within the short time frame provided for compliance. These investments may not be reversible if the rule is in fact revised after reconsidering and fully evaluating all of the relevant data. *See* Luminant PFR at 33. As stated above, such unrecoverable costs could lead to dire economic consequences for Texas EGUs and have equally dire collateral economic consequences on Texas communities and the citizenry who rely on the EGUs for their economic livelihood. *See id.* at 33-34.

Taking into account all of those considerations, the equities weigh heavily in favor of granting Texas a stay pending judicial review. Nothing more should be required to grant Texas's stay request. If, however, the EPA needs further proof, consideration should be given to the irreparable harm that Texas and the public will suffer if a limited stay is not granted. In particular, if a stay pending appeal is not issued, the Final Rule, as it presently stands, will degrade Texas's electric reliability and threaten its electricity consumers with enhanced risk of power outages.

2. The Final Rule will cause irreparable harm to Texas.

The Final Rule threatens to disrupt the provision of reliable electricity through the interconnected web of electric-transmission systems serving Texas consumers. There are three main interconnected networks, or power grids, that comprise the electric-power system in the continental United States: the Eastern Interconnect, the Western Interconnect, and the Texas (ERCOT) Interconnect. The Texas Interconnect is not connected with the other networks, except through certain direct current ("DC") interconnection facilities, and the other two have limited interconnection with each other (also through DC interconnections). *See* Electric Power Industry Overview 2007, Energy Information Administration, *available at* http://www.eia.gov/cneaf/electricity/page/prim2/toc2.html.

Portions of Texas fall into each of the three interconnects, and power generation in Texas is monitored by several regional reliability councils, including ERCOT, the Western Electricity Coordinating Council ("WECC"), the Southwest Power Pool ("SPP"), and the Southeastern Electric Reliability Council ("SERC"). *See id.* The Final Rule could have direct impacts in all of the electric-power systems regulated by these regional reliability councils, including ERCOT. Because of their interconnectedness, compliance decisions made by one regional authority could impact the others. For example, compliance decisions made by Texas EGUs could have direct impacts to power-system reliability in the WECC, SPP, or SERC for EGUs whose operations span multiple States. These considerations are critical to understanding the far-reaching impact of the Final Rule. But notably, EPA did not evaluate these issues, nor did it provide an opportunity to comment on

these impacts in the Proposed Rule. *See* Southwestern Public Service Company's Petition for Reconsideration, Docket No. EPA-HQ-OAR-2009-0491 (Aug. 23, 2011).

At the request of Texas's Public Utility Commission, however, ERCOT has at least studied the impact that the Final Rule will have on the reliability of Texas's primary electric grid and power-delivery system. *See generally* ERCOT report. The ERCOT Report demonstrates the harm to Texas. It concludes that the Final Rule will immediately and directly impact Texas EGUs through allocation of emission allowances, compliance deadlines, and substantial noncompliance penalties. *See id.* at 2-3. To achieve the impending compliance deadlines, EGUs must consider whether to implement one or more of several compliance options. *See id.* at 3-4.

One option for reducing SO_2 emissions is switching to "lower sulfur content fuel." *Id.* at 3. That switch, however, is fraught with risk. For one thing, "the demand for lower sulfur coal is expected to exceed the mining capacity and/or railroad capacity necessary to deliver the coal to Texas." *Id.* For another thing, the switch may cause "unit capacity derates" and "may require modifications to the unit's air emissions permit." *Id.* In any event, EPA provides no analysis of economic availability of low-sulfur coal. *See* Final Rule, 76 Fed. Reg. at 48,279-281.

Another option would involve more frequent use of existing SO_2 control equipment such as wet-limestone scrubbers and possibly increase the effectiveness of this equipment. *Id.* But this option is available to only "a small subset of coal plants in ERCOT" and, in any event, the expected benefit of employing this option is only a 1 to 2 percent decrease in the maximum net output of units to which the option might apply. *Id.* Additionally, increased use of such controls could easily require permit modifications that could not be completed in time to comply with the Final Rule's deadline, and EPA failed to consider SIP-approved state-specific permitting requirements.

A third option to reduce SO_2 emissions is dry sorbent injection. *Id.* This option may decrease SO_2 emissions by 25 to 30 percent in units without existing necessary control equipment. *Id.* But if this option is to be employed, public notice or modifications to air permits may be required. *Id.*

Reducing NO_X emissions will likely entail "high capital cost unit retrofits, including the addition of selective non-catalytic reduction (SNCR) or selective catalytic reduction (SCR) technologies." *Id.* Making these changes will require "several years for permitting, design and construction." *Id.* Given this reality, the Final Rule's near-term compliance deadlines are problematic, to say the least.

The near-term impossibility of these "options" leaves Texas EGUs with just one option: decrease production. This could be accomplished by (1) decreasing EGU outputs to their minimum levels during off-peak hours, then powering up to maximum capacity during peak afternoon hours; or (2) imposing extended unit outages. *Id.* Making either of these choices, however, will cause reliability problems. *See id.* at 3-4 (noting that, if these dispatch patterns are employed, traditionally

base-loaded units can be expected to experience increased maintenance outages and long start-up requirements, making them unavailable during off-peak extreme weather events).

Considering these compliance options, ERCOT has estimated the likely "aggregate impacts on the ERCOT system." *Id.* at 4. ERCOT's analysis indicates that the Final Rule's "annual SO_2 program is likely to be the most restrictive on the ERCOT system." *Id.* The NO_X program is not as likely to be as restrictive as the SO_2 program, but, if Texas has another extended hot summer like the record one currently being experienced in 2011, EGUs would need to obtain additional emission allowances through trading of NO_X emissions allowances. *See id.*

However, "there will not be a liquid market throughout the year for allowances" due to uncertainty among resource owners and stiff civil and criminal penalties for non-compliance. *Id.* at 6. Moreover, it can be expected that unforeseen complications will likely cause the various compliance options to not always function as designed, nor perform as anticipated. *Id.* Given these assumptions, ERCOT developed three likely compliance scenarios to assess the risks to the system posed by the Final Rule. *Id.* All of the events depicted in these scenarios are reasonably foreseeable in light of the realities of having to comply with the Final Rule.

Scenario one relies on the compliance plans of which Texas EGUs have notified ERCOT. *Id.* This scenario anticipates an incremental reduction in available operating capacity of approximately 3,000 MW in the off-peak months of March, April, October, and November, and an operating capacity reduction of 1,200-1,400 MW during the remainder of the year, including the peak-load months of June-August. *Id.*

Scenario two builds upon the first by assuming that increased dispatching of "base-load units" will cause increased maintenance outages, especially in the fall months. *Id* at 5. That is, beyond the reduced capacities assumed in scenario one, the outages envisioned under scenario two will result in an additional loss of approximately 5,000 MW of capacity during October and November, and possibly December. *Id.*

Finally, scenario three adds to scenario two by considering "possible near-term market limitations on the availability of imported low-sulfur coals, either due to nationwide demand exceeding mine output capacity or railroad shipping capacity." *Id.* This occurrence would unleash a domino effect whereby "coal plant resource owners would be forced to rely on higher sulfur coals during the spring and peak season summer months," and then, in order to conserve allocated resources, these owners would be forced to reduce unit output in the fall, causing decreased capacity in October and November. *Id.* As a result, under scenario three's assumptions, the ERCOT system could experience approximately 6,000 MW of lost capacity during October and November, and possibly December, which would be in addition to the reduced capacities of scenario one. *Id.* That is, scenario three could result in 1,000 MW more in lost capacity during October, November and December beyond that which is envisioned under scenario two. *Id.* Additionally, in this third scenario, ERCOT would expect incremental capacity losses of approximately 3,000 MW in the off-

peak months of March and April and approximately 1,200-1,400 MW during the remainder of the first nine months of the year. *Id.*[13]

Even under the best-case scenario (scenario one), ERCOT can expect that EGUs' attempts at complying with the Final Rule will result in "a reduction in available operating capacity of 1,200-1,400 MW during the peak season of 2012." *Id.* To put that operating loss into perspective, if it had occurred in the peak season of 2011, ERCOT would have experienced rotating outages in August. *Id.* Even without the Final Rule that would force ERCOT to lose thousands of MWs of generation capacity, on at least one day this summer, ERCOT was forced to import over 1,000 MW under emergency protocols from grids outside ERCOT to meet its system needs. *See* Press Release, Elec. Reliability Council of Texas, ERCOT Breaks Peak Demand Record Third Time (August 3, 2011), *available at*, http://www.ercot.com/news/press_releases/show/416. It is therefore easily foreseable that implementation of the Final Rule has a significant likelihood of resulting in rolling blackouts in 2012 and beyond.

What is more, there is a greater risk of rotating outages during the off-peak months, too, because of the reductions predicted in the three scenarios coupled with annual maintenance outages and weather variability during the off-peak season. ERCOT Report at 5. As undesirable as these scenarios are, they likely *underestimate* the severity that might befall Texas if the Final Rule goes into effect. Open Meeting of the Pub. Util. Comm'n of Tex., Hearing on the Reliability Impacts of CSAPR, Sept. 1, 2011 (statement of Warren Lasher, ERCOT System Planning Manager (minutes 30:20-31:13), *available at* http://www.texasadmin.com/puct.shtml)); *see also* ERCOT Report at 6 (explaining that, "[d]ue to numerous uncertainties, ERCOT cannot confidently estimate a 'worst case' scenario at this time"). Combinations of certain events discussed in the ERCOT Report may "further increase the risk of increasingly frequent and unpredictable emergency conditions, including the potential for rotating outages." ERCOT Report at 6. In sum, the Final Rule's effective date and compliance deadlines do not allow ERCOT and Texas EGUs sufficient time to take the steps necessary to avoid the loss of thousands of megawatts of capacity and the specter of rotating outages for Texas power customers. *See id.* at 7.

As it presently stands, the Final Rule threatens to destabilize Texas's power-delivery system by increasing the risk of rotating power outages that will leave swaths of Texans without electricity for indeterminate periods of time. That situation is *per se* irreparable harm. *See Cal. Indep. Sys. Operator Corp. v. Reliant Energy Servs., Inc.*, 181 F. Supp. 2d 1111, 1121 (E.D. Cal. 2001) (holding that rolling blackouts put health and safety of citizens at risk and constitute irreparable harm); *see also Westlands Water Dist. v. U.S. Dep't of Interior*, No. Civ. F00-7124 WWDLB, 2001 WL 34094077, at *11 n.33 (E.D. Cal. 2001) (stating that serious harm occurs when energy cannot be obtained and power consumers are directly deprived); *U.S. Transmission Sys. v. Americus Ctr., Inc.*, Civ. A. No. 85-7044, 1986 WL 1202, at *12 (E.D. Pa. 1986) (stating that the termination of essential utilities such as electricity can cause irreparable harm). Indeed, the mere "threat of a blackout"

13. All of these scenarios fail to consider: (1) possible barriers to increasing production (at units that are currently designated as "peaking units") that are inherent in modification of existing permits; and (2) the necessity of meeting other federal standards, including both the 2010 NO_X and SO_2 NAAQS.

demonstrates irreparable harm. *Cf. City of Cleveland v. Cleveland Elec. Illuminating Co.*, 684 N.E.2d 343, 350 (Ohio Ct. App. 1996); *cf. also Pa. Power & Light Co. v. Leininger*, No. 81 E 30, 1983 WL 384, at **5 (Pa. Ct. Common Pleas 1983) (holding that defendant's actions constituted a clear and present as well as future danger of irreparable harm to an electrical company's customers by hindering or obstructing the company's maintenance of a power transmission line serving those customers).

Should rotating outages occur, Texas can expect severe economic and concomitant public-health effects, including death or severe disablement.[14] The effects would be most pronounced during summer and winter, when Texas experiences both extreme heat and cold events. *See generally* http://atmo.tamu.edu/osc/ (information available from the Office of the Texas State Climatologist). The Final Rule's adverse consequences will result in substantial risks to the health, welfare, and lives of Texans—vulnerable senior citizens and economically disadvantaged families in particular. Heat is the number one weather-related killer in the United States, resulting in hundreds of fatalities each year. On average, excessive heat claims more lives each year than floods, lightning, tornadoes, and hurricanes combined. *See* Heat Wave: A Major Summer Killer, Nat'l Oceanic & Atmospheric Admin., *available at* http://www.noaawatch.gov/themes/heat.php. An average of approximately 175 people die each year from heat-related causes. *See* The Heatwave of July 1995, Nat'l Oceanic & Atmospheric Admin., *available at* http://www.crh.noaa.gov/arx/events/heatwave95.php. Heat waves can exacerbate heat-related deaths, as illustrated during the summer of 1980 when an estimated 10,000 people were killed nationwide by a heat wave. *See* Billion Dollar U.S. Weather Climate Disasters, Nat'l Oceanic & Atmospheric Admin., *available at* http://lwf.ncdc.noaa.gov/oa/reports/billionz.html. In August 2003, an estimated 50,000 Europeans were killed by a heat wave. *See* Heat Wave: A Major Summer Killer, Nat'l Oceanic & Atmospheric Admin., *available at* http://www.noaawatch.gov/themes/heat.php.

According to EPA, "[a]ir conditioning is the best defense" to prevent heat-related problems, and EPA therefore recommends that local governments "work with utilities to ensure that no one's electricity is turned off during a heat wave." *See* Planning for Excessive Heat Events, EPA (Apr. 2009), *available at* http://www.epa.gov/agingepa/resources/factsheets/lowlit_itdhpfehe_100-F-09-019.pdf. As a result of power shortages due to Japan's recent earthquake and tsunami, the number of people taken to the hospital for heatstroke tripled in June of this year, compared to June of last year. *See* Michael Marshall & Wendy Zuckerman, Japanese Power Cuts Linked to Heatstroke Deaths, NEW SCIENTIST, July 19, 2011, *available at* http://www.newscientist.com/article/dn20716-japanese-power-cuts-linked-to-heatstroke-deaths.html. Japanese health experts are warning the public of the risk of heat stroke if they refrain from using air conditioning, noting that "air conditioning is the best help for people with illnesses and for elderly people to avoid heatstroke."

---

14. Mortality and morbidity associated with extreme temperature related events is widely discussed and acknowledged. Power outages due to inadequate base-load capacity will likely increase mortality and morbidity following implementation of the Final Rule during months in which extreme temperature events are likely.

See Heatstroke Feared as People Save Power, JAPAN TIMES ONLINE, July 10, 2011, *available at* http://search.japantimes. co.jp/cgi-bin/nn20110710a3.html.

Moreover, economic hardship will result from power-plant shutdowns and lignite-mine closures. Not only will the people currently employed by these plants suffer the harm of unemployment, but the entire area will also suffer economic depression. Tax revenue from the power industry and associated mining activity funds significant portions of county tax rolls. The education system and infrastructure of an area supported by this industry will not be sustainable without sufficient revenue. As an example of the potential economic harm, the Texas Comptroller estimates that a loss of just $1 million from power production in Titus County would result in an additional loss of $420,000 and three jobs within Texas. Within the county, the loss would amount to an additional $160,000 for each million dollars of direct loss of revenue. (For comparison purposes, the estimated appraised value of the power plant and mine in Titus County is $967 million. The amount of tax revenue to Titus County is $16.7 million. In addition, the mines for this plant also provide approximately $386,000 in tax revenue to two other counties, Camp and Hopkins Counties.)

That is not all. As electricity demand increases to a point that electric reliability in the ERCOT region is jeopardized, ERCOT will implement its Energy Emergency Alert procedures to prevent loss of power across the grid. To meet electricity demand under constrained system operations, ERCOT first seeks demand reduction through a program of voluntary load curtailment in an effort to avoid involuntary load shed (rolling blackouts). To the extent that constrained system operations lead customers (*i.e.*, hospitals, schools, water/waste water treatment plants) choose to utilize back-up generators, these units would emit at substantially higher emission rates than coal-fired EGUs, and they would have a direct impact on highly populated urban areas with existing air-quality challenges such as Dallas, Houston, Austin, and San Antonio. However, if after taking all of these steps, ERCOT cannot satisfy electricity demand with available generation resources, ERCOT's only remaining option would be to order involuntary load shed in the form of rotating blackouts.

In short, Texas has shown that the Final Rule presents a real and imminent threat to Texas's power-delivery system—which in turn threatens Texans' lives and livelihoods. For this additional reason, a stay should be granted pending judicial review of the Final Rule.

RELIEF REQUESTED

For the reasons explained above, Texas respectfully requests that EPA convene a proceeding for reconsideration of the Final Rule. Texas further requests an immediate stay of the Final Rule's effectiveness and its compliance deadlines as to Texas for the longer of EPA's reconsideration proceeding or any subsequent action for judicial review. Finally, Texas requests that EPA extend the compliance deadlines as to Texas to reflect any period during which the rule's effectiveness was stayed.

Respectfully submitted,

GREG ABBOTT
Attorney General of Texas

DANIEL T. HODGE
First Assistant Attorney General

BILL COBB 9.8.11
Deputy Attorney General for Civil Litigation

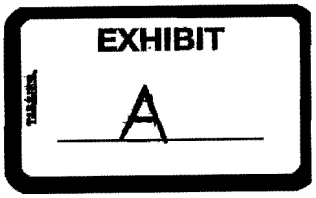
JAMES D. BLACKLOCK
Special Assistant and Senior Counsel

OFFICE OF THE ATTORNEY GENERAL OF TEXAS
P.O. Box 12548
Austin, Texas 78711-2548
(512) 936-8160

ATTORNEYS FOR PETITIONERS

EXHIBIT A

Impacts of the Cross-State Air Pollution Rule on the ERCOT System



September 1, 2011

Executive Summary

ERCOT was asked by the Public Utility Commission of Texas (PUCT) in the Open Meeting on July 8, 2011, to evaluate the impacts of the Cross-State Air Pollution Rule (CSAPR) on the reliability of the ERCOT grid. The ERCOT analysis included meetings with representatives of the Texas Commission on Environmental Quality and the U.S. Environmental Protection Agency, review of the compliance strategies provided by the owners of coal-fired resources in the ERCOT region, and consolidation of these compliance strategies for purposes of evaluating system-wide impacts.

Based on the information provided by the resource owners, ERCOT developed three scenarios of potential impacts from CSAPR. The first scenario, derived directly from the compliance plans of individual resource owners, indicates that ERCOT will experience a generation capacity reduction of approximately 3,000 MW during the off-peak months of March, April, October and November, and 1,200 – 1,400 MW during the other months of the year, including the peak load months of June, July and August. Scenario 2, which incorporates the potential for increased unit maintenance outages due to repeated daily dispatch of traditionally base-load coal units, results in a generation capacity reduction of approximately 3,000 MW during the off-peak months of March and April; 1,200 – 1,400 MW during the remainder of the first nine months of the year; and approximately 5,000 MW during the fall months of October, November and possibly into December. Scenario 3 includes the impacts noted for Scenario 2, along with potential impacts from limited availability of imported low-sulfur coal. This scenario results in a generation capacity reduction of approximately 3,000 MW during the off-peak months of March and April; 1,200 – 1,400 MW during the remainder of the first nine months of the year; and approximately 6,000 MW during the fall months of October, November and possibly into December.

When the CSAPR rule was announced in July, it included Texas in compliance programs that ERCOT and its resource owners had reasonably believed would not be applied to Texas. In addition, the rule required implementation within five months – by January 2012. The implementation timeline provides ERCOT an extremely truncated period in which to assess the reliability impacts of the rule, and no realistic opportunity to take steps that could even partially mitigate the substantial losses of available operating capacity described in the scenarios examined in this report. In short, the CSAPR implementation date does not provide ERCOT and its resource owners a meaningful window for taking steps to avoid the loss of thousands of megawatts of capacity, and the attendant risks of outages for Texas power users.

If the implementation deadline for CSAPR were significantly delayed, it would expand options for maintaining system reliability. ERCOT is advancing changes in market rules – such as increasing ERCOT's ability to control the number and timing of unit outages and expanding demand response – that could help avert emergency conditions. These measures will not, however, avoid the losses in capacity due to CSAPR that increase the risk of such emergencies. As discussed in this report, those losses will, at best, present significant operating challenges for ERCOT, both in meeting ever-increasing peak demand and in managing off-peak periods in 2012 and beyond.

Table of Contents

Impacts of the Cross-State Air Pollution Rule on the ERCOT System

1. Introduction

ERCOT was asked by the Public Utility Commission of Texas (PUCT) in the Open Meeting on July 8, 2011, to evaluate the impacts of the Cross-State Air Pollution Rule (CSAPR) on the reliability of the ERCOT grid. The final language of the CSAPR was released by the U.S. Environmental Protection Agency (EPA) on July 6, 2011, and was published in the Federal Register on August 8, 2011.

The CSAPR is one of several environmental rules proposed by EPA that affect electric generation. The CSAPR includes three separate compliance programs: an annual SO_2 program, an annual NO_X program, and a peak season NO_X program (for emissions during the peak ozone season of May – September). In the proposed rule (then known as the Clean Air Transport Rule [CATR]), Texas was only included in the peak season NO_X program. Based on the proposed rule, an ERCOT study completed on June 21, 2011, evaluating the expected impacts of the pending regulations, did not include any incremental impacts from the CATR on the ERCOT system.

In the CSAPR rule actually adopted by the EPA, however, Texas is included in all three compliance programs - the peak season NO_X program, the annual NO_X program, and the annual SO_2 program. The implementation date for the CSAPR is January 1, 2012.

In order to accomplish this review, ERCOT undertook several activities.

- ERCOT reviewed documentation published on the EPA web-site regarding the rule.
- ERCOT met with representatives of the Texas Commission on Environmental Quality (TCEQ) and the EPA.
- ERCOT consulted with environmental experts from several of the generating entities in the ERCOT region whose facilities were likely to be affected by the CSAPR regulations. The purpose of these meetings was to ascertain the likely compliance plans for those resources owners.
- These compliance plans were aggregated so that ERCOT could evaluate the likely impacts to grid reliability.

2. Rule Description

The CSAPR is being implemented in order to address the interstate transport of sulfur dioxide (SO_2) and nitrogen oxides (NO_X). The rule is a replacement for the Clean Air Interstate Rule (CAIR), which was implemented in 2005. The CAIR was remanded to the EPA by the United States Court of Appeals for the District of

Columbia Circuit in 2008. In the CAIR program, Texas was regulated for particulate matter emissions (annual NOX and SO2 emissions).

Under CSAPR, generating units in Texas will be regulated for annual emission of SO2 and NOX, as well as emissions of NOX during the peak season (May – September). Each unit will be given a set allocation of emissions allowances. At the end of the calendar year, resource owners must turn in one allowance for each ton of emissions or be subject to penalties. Intra-state trading of allowances between resource owners is unlimited in the rule. However, interstate trading of allowances is capped – no state can have annual net imports of allowances of more than approximately 18% of the total state allocation of allowances. If this limit is exceeded, any resource owner that contributed to the excessive use of imported allowances will be subject to penalties.

Resource owners in Texas are permitted to trade SO2 allowances with resource owners in Kansas, Nebraska, Minnesota, Alabama, Georgia and South Carolina. Trading of NOX emissions will be allowed with states as depicted on the following map.

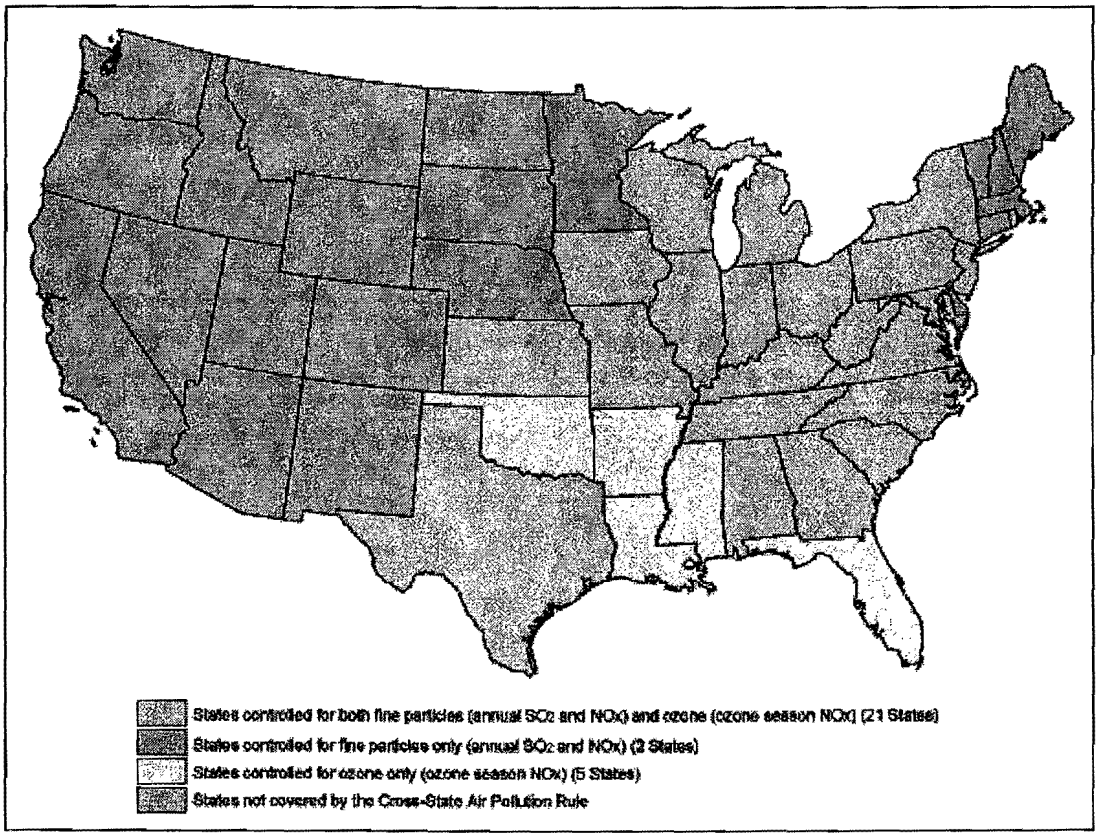


Figure 1: States Included in the Cross-State Air Pollution Rule

Resource owners who have emissions in excess of their annual allocations will have their next year's allocations reduced by one emission for each excess ton of emissions, plus a penalty of two additional allowances for each excess ton. In addition, the Clean Air Act includes provisions for civil lawsuits in the event of non-compliance. Non-compliance penalties under the CSAPR program are substantial, and can reach up to $37,500 per violation per day. In addition to program penalties, failure to comply can subject entities to the risk of civil penalties, lawsuits by private parties, and criminal liability.

3. Compliance Options

Resource owners have several near-term compliance options to meet the emissions limits established by the CSAPR. In order to reduce SO_2 emissions, lower sulfur content fuel can be used. In the case of plants that are currently burning lignite coal, or a mix of lignite and sub-bituminous coals (such as coal from the Powder River Basin [PRB] region of northwest Wyoming), increasing the use of low sulfur western coal will reduce SO_2 emissions. Units that currently are being fueled exclusively by western sub-bituminous coals can be switched in whole or in part to ultra-low-sulfur western coals.

In the near-term, the demand for lower sulfur coal is expected to exceed the mining capacity and/or the railroad capacity necessary to deliver the coal to Texas. In addition, the use of lower sulfur coals can result in unit capacity derates due to increased heat content of the fuel. Unit modifications to resolve any such derates may require modifications to the unit's air emissions permit.

Existing SO_2 control equipment, such as wet-limestone scrubbers, can be utilized more frequently than is current practice, and in some cases the effectiveness of this equipment can be increased. This option only applies to a small subset of coal plants in ERCOT, and the use of scrubbers results in a decrease in maximum net output from the affected units of about 1 to 2 percent.

The use of dry sorbent injection is another compliance option to reduce SO_2 emissions. Dry sorbent compounds, such as sodium bicarbonate and trona, can be injected into a flue duct where they react with SO_2 (and acid gases) to form compounds that can be removed using an electrostatic precipitator (ESP) or baghouse. Resource owners exploring this option anticipate that it will provide a 25 – 30% reduction in emissions of SO_2 on units without existing SO_2 control equipment. The use of dry sorbent injection may require public notice or air permit modification.

Most of the low cost options to reduce NO_X emissions have been utilized to comply with existing air quality regulations. Further reductions will likely require high capital cost unit retrofits, including the addition of selective non-catalytic reduction (SNCR) or selective catalytic reduction (SCR) technologies. Any such unit changes would require several years for permitting, design and construction.

The remaining option for reducing SO_2 and NO_X emissions will be reducing unit output, either through dispatching units down to minimum levels during the off-peak hours and up to maximum capacity during peak afternoon hours, or through extended unit outages. Some of the traditionally base-loaded units will

experience increased maintenance outages due to this daily dispatch pattern. These same base-load units have long start-up requirements, which could make them unavailable for operation during some off-peak extreme weather events.

4. Study Methodology

In order to evaluate the potential impacts associated with implementation of the CSAPR, ERCOT met with representatives of the TCEQ and the EPA to evaluate details of the rule and its implementation. ERCOT also reviewed compliance strategies provided by the owners of coal-fired resources in the ERCOT region. ERCOT consolidated these compliance strategies for purposes of evaluating system-wide impacts.

5. CSAPR Impacts

The compliance strategies of individual resource owners were compiled and consolidated to determine the aggregate impacts on the ERCOT system. This analysis indicates that, of the three CSAPR programs, the annual SO_2 program is likely to be the most restrictive on the ERCOT system. Even though individual units may have emissions in excess of the peak season or annual NO_X limits, Texas as a whole is likely to be below the state-wide limit, indicating that resource owners can achieve compliance through trading of NO_X emissions allowances. An extended hot summer, such as the one experienced in 2011, may result in limited availability of peak season NOX emissions, and a need to obtain additional allowances from out-of-state.

In consolidating the compliance strategies from the resource owners, it became apparent that each resource owner was assuming a level of effectiveness of the various compliance options identified in Section 3. While many of these compliance plans are likely to be adequate, given the risks associated with each compliance option, it is unlikely that all of the resource owners' plans will function as designed. For example, the use of dry sorbent injection on the scale required to attain compliance at certain facilities may perform as anticipated, but its use in this context is novel and may involve unexpected complications. As a result, ERCOT has developed three compliance scenarios in order to assess the potential risks to the system based on different assumptions regarding implementation of compliance strategies.

The first scenario is derived directly from the compliance plans of individual resource owners. Based on the information that ERCOT has been given, in this scenario, the ERCOT region will experience an incremental reduction in available operating capacity of approximately 3,000 MW in the off-peak months of March, April, October and November, and an operating capacity reduction of 1,200 – 1,400 MW during the other months of the year, including the peak load months of June, July and August. Capacity reductions in the off-peak months are expected to be greater because power prices are lower during these periods, making them a more attractive time for resource owners to take extended outages to conserve allocated allowances.

The second scenario is derived from the first, but includes the additional assumption that the increased dispatching of base-load units will lead to increased maintenance outages, especially in the fall months. Over the course of the spring months it may become increasingly apparent that dispatching specific units is leading to extensive maintenance requirements. In these cases it may be cost-effective to idle these units rather than dispatch them down to minimum levels during off-peak hours. These units would likely be run through the summer peak months, but then would be idled for an extended period in the fall in order to conserve allocated allowances. Given this additional constraint, it is likely that ERCOT would experience an incremental loss of approximately 3,000 MW of capacity in the off-peak months of March and April, approximately 1,200 – 1,400 MW during the remainder of the first nine months of the year, and approximately 5,000 MW of capacity during the fall months of October, November and possibly into December.

The third scenario is derived from the second, with the added consideration of possible near-term market limitations on the availability of imported low-sulfur coals, either due to nationwide demand exceeding mine output capacity or railroad shipping capacity. In the event of such limitations, coal plant resource owners would be forced to rely on higher sulfur coals during the spring and the peak season summer months. As a result, they would be forced to further reduce unit output in the fall months, beyond what is currently included in their compliance strategy, and could be required to decommit additional capacity in October and November in order to conserve allocated allowances. As a result, given these assumptions, it is likely that ERCOT would experience an incremental loss of approximately 3,000 MW of capacity in the off-peak months of March and April, approximately 1,200 – 1,400 MW during the remainder of the first nine months of the year, and approximately 6,000 MW of capacity during the fall months of October, November and possibly into December.

6. Discussion

The scenarios analyzed in this study represent best-case (Scenario 1), and two cases with increasing impacts to system reliability. Scenarios 2 and 3 are based on the occurrence of events that are reasonably foreseeable given the circumstances facing generation resources attempting to comply with the CSAPR. Even in the best-case scenario, ERCOT is expected to experience a reduction in available operating capacity of 1,200 – 1,400 MW during the peak season of 2012 due to implementation of the CSAPR. Had this incremental reduction been in place in 2011, ERCOT would have experienced rotating outages during days in August. Off-peak capacity reductions in the three scenarios evaluated as part of this study, when coupled with the annual maintenance outages that must be taken on other generating units and typical weather variability during these periods, also place ERCOT at increasing risk of emergency events, including rotating outages of customer load.

There are numerous unresolved questions associated with the impacts of the CSAPR on the ERCOT system. It is important to note that the resource owners have had less than two months to develop compliance plans for the new rule. These plans are still preliminary and based on assumptions regarding technology

effectiveness, fuel markets, impacts of altered unit operations on maintenance requirements, and the cost-effectiveness of modifying and operating units to comply with the CSPAR. The overall system impacts noted in this study will change if these individual compliance strategies are adjusted to take into account updated information.

The availability of SO_2 allowances for purchase by resource owners in Texas is a significant source of uncertainty at this time. A lack of allowances for purchase from out-of-state resources will likely increase the severity of the CSAPR rule. Many resource owners expressed their concern that parties that have excess allowances may, at least initially, hold on to their excess, in order to maintain flexibility and future compliance options. As noted in Section 2, given the penalties for non-compliance, resource owners are unlikely to exceed the number of allowances they have in hand, with the expectation that allowance markets will open up later in the year. It may be that some resource owners will keep their excess allowances until it becomes clear that they will not be needed, late in the year. Other resource owners may have to shut units down in the early fall in order to conserve allowances.

In addition, the information ERCOT has received indicates there will not be a liquid market throughout the year for allowances, which will make it difficult to determine the appropriate value of allowances to compensate resource owners for operations associated with reliability commitments, such as through the daily or hourly reliability unit commitment process. It may be necessary to administratively establish a value for these allowances through the market stakeholder review process.

It is also possible that the impacts of CSAPR will increase in 2013 and 2014. In those years, it is unlikely that resource owners will have any additional options for rule compliance. Increased dispatching of base-load units will likely continue to lead to extended maintenance outages, and delivered availability of low sulfur western coals is likely to remain limited. In addition to these factors, some resource owners will be placing units on extended outages to install emission control technologies, such as wet-limestone scrubbers and possibly selective catalytic or selective non-catalytic reduction equipment. These retrofit outages could further reduce the generation capacity available during off-peak months.

Due to the numerous uncertainties, ERCOT cannot confidently estimate a "worst case" scenario at this time. Combinations of particular events may result in reductions in operating capacity that exceed those identified in Scenario 3, and thus further increase the risk of increasingly frequent and unpredictable emergency conditions, including the potential for rotating outages. The best outcome ERCOT can expect occurs if Scenario 1 is realized (*i.e.,* all generation resources' current plans come to fruition), and, as discussed above, Scenario 1 appreciably increases risks for the ERCOT system, in both the on-peak and off-peak months.

7. Conclusion

When the CSAPR rule was announced in July, it included Texas in compliance programs that ERCOT and its resource owners had reasonably believed would

not be applied to Texas. In addition, the rule required implementation within five months – by January 2012. The implementation timeline provides ERCOT an extremely truncated period in which to assess the reliability impacts of the rule, and no realistic opportunity to take steps that could even partially mitigate the substantial losses of available operating capacity described in the scenarios examined in this report. In short, the CSAPR implementation date does not provide ERCOT and its resource owners a meaningful window for taking steps to avoid the loss of thousands of megawatts of capacity, and the attendant risks of outages for Texas power users.

If the implementation deadline for CSAPR were significantly delayed, it would expand options for maintaining system reliability. ERCOT is advancing changes in market rules – such as increasing ERCOT's ability to control the number and timing of unit outages and expanding demand response – that could help avert emergency conditions. These measures will not, however, avoid the losses in capacity due to CSAPR that increase the risk of such emergencies. As discussed in this report, those losses will, at best, present significant operating challenges for ERCOT, both in meeting ever-increasing peak demand and in managing off-peak periods in 2012 and beyond.