

**BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

In the Matter of the Final Rule:

Federal Implementation Plans:
Interstate Transport of Fine
Particulate Matter and Ozone and
Correction of SIP Approvals.
76 Fed. Reg. 48208 (August 8, 2011)

PETITION FOR RECONSIDERATION AND STAY

The Florida Electric Power Coordinating Group (“FCG”) requests that the United States Environmental Protection Agency (“EPA”), by and through its Administrator, reconsider its adoption of its “Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals” (a.k.a., the Cross-State Air Pollution Rule, or CSAPR), 76 Fed. Reg. 48208 (August 8, 2011), and stay the implementation of the rule in Florida pending the outcome of this Petition. In sum, there are compelling legal, factual and policy reasons for EPA to reconsider Florida’s inclusion in CSAPR, as well as the insufficient statewide allocations for Florida, and CSAPR’s premature effective date. As grounds for Reconsideration and Stay, and as explained in more detail below, the FCG states that:

- (1) EPA did not provide proper notice of the substantial changes it made to the proposed CSAPR.
- (2) EPA’s modeling and methodology are flawed: EPA’s own data, as well as current data, show that Florida should not be included in CSAPR; anomalies in EPA’s

(outdated) results related to Florida's impact on Houston raise serious questions regarding whether EPA should include Florida in CSAPR; and EPA's use of erroneous data and methodology resulted in an under-allocation of emission allowances for Florida.

- (3) EPA improperly requires disproportionate and excessive emission reductions in Florida.
- (4) EPA has violated the Clean Air Act's cooperative federalism structure by not first allowing states to develop their own remedy, which for Florida could include codifying the substantial reductions already achieved by Florida's sources.
- (5) EPA has failed to adequately consider the reliability and economic impacts of CSAPR, as well as the combined impacts of CSAPR and many other rules that are pending or recently promulgated that are aimed at electric generating units.
- (6) EPA's January 1, 2012, effective date for CSAPR is unsupported by any sound rationale, fails to provide adequate time for compliance, and is arbitrary and capricious.

AUTHORITY FOR RECONSIDERATION AND STAY

EPA's authority for CSAPR is derived from section 301(a)(1) and section 110(a)(2)(D) of the Clean Air Act ("CAA"). Pursuant to Section 307(d)(7)(B) of the CAA, EPA shall convene a proceeding for reconsideration if the party seeking reconsideration demonstrates that the objection is of central relevance to the outcome of the rule, and that it was impracticable to raise the objection during the public comment period, or that the grounds for the objection arose after the public comment period. Alternatively, EPA has authority to reconsider a promulgated rule through notice-and-comment rulemaking pursuant to 5 U.S.C. § 553.

As described further below, the FCG has serious concerns regarding EPA's inclusion of Florida in CSAPR based on EPA's modeled linkages between Florida and Harris County, Texas. For example, analysis of EPA's final modeling results, which were not available until EPA published the final rule, demonstrates that the issues at the relevant Harris County receptors are resolved without any assistance from CAIR- or CSAPR-related reductions, from Florida or any other states. Further, modeling based on current data recently presented in congressional testimony, well after the close of the public comment period, demonstrates that Harris County is neither a nonattainment nor a maintenance site, and therefore Florida should not be in CSAPR. In fact, 2008-2010 data show that Houston's air quality is already attaining the 1997 ozone national ambient air quality standards ("NAAQS"). EPA's determination of nonattainment or maintenance sites and up-wind state linkages are the basis for including states within CSAPR. Thus, any errors or deficiencies in these determinations are of central relevance to the rule.

The FCG had no notice of the changes EPA made in the final CSAPR with respect to the methodology for determining state budgets, and with respect to the substantial changes to the final state budget determinations themselves. As a result, the grounds for objections to these matters arose only after CSAPR was published, well beyond the public comment period. EPA's methodology for establishing state budgets, as well as the budgets themselves, are at the core of CSAPR's compliance requirements and are therefore of central relevance to the outcome of CSAPR.

EPA's un-noticed final state budget methodology and allocation determinations raise a number of issues that the FCG was prevented from addressing during the public comment period, including (i) errors in EPA's final methodology and modeling inputs; (ii) disproportionate and excessive emission reduction requirements for Florida; (iii) inadequate

consideration of the impact of Florida's final budget on electric reliability; and (iv) the propriety of CSAPR's January 1, 2012, effective date.

Section 307(d)(7)(B) of the CAA allows EPA to stay a rule's effect for a period not to exceed three months. Alternatively, EPA is authorized to stay the effect of a rule promulgated through notice-and-comment rulemaking "as justice so requires," pursuant to 5 U.S.C. § 553. See, e.g., Stay of the Findings of Significant Contribution and Rulemaking for Georgia for Purposes of Reducing Ozone Interstate Transport, 70 Fed. Reg. 51591 (August 31, 2005) (in response to a petition for reconsideration, EPA stayed the NOx SIP Call rule as it applied to Georgia pending the outcome of notice-and-comment proceedings to address issues raised in the petition).

The FCG respectfully requests that EPA immediately stay the implementation of CSAPR in Florida pending the outcome of this Petition, for the reasons explained in this Petition, based on the authority in 5 U.S.C. § 553. A Stay is needed immediately to avoid irreparable harm to the FCG members that must immediately buy allowances, import power, or expend other resources to comply with CSAPR's impending 2012 deadline.

This Petition is timely filed within the 60-day time period for judicial review, pursuant to section 307(b)(1) of the CAA.

IDENTIFICATION OF PETITIONER

The FCG is a non-profit organization in the State of Florida that represents investor-owned utilities, electric cooperatives, and municipal utilities on environmental and transportation issues affecting the electric utility industry. The FCG has actively participated in EPA's efforts to implement section 110(a)(2)(D)(i)(I) of the CAA for years, and submitted detailed comment on EPA's proposed Cross-State Air Pollution Rule and subsequent Notices of Data Availability.

The FCG is authorized to pursue this Petition on behalf of its members, who will be directly and substantially affected by CSAPR's emission reduction requirements.

BACKGROUND

EPA published the proposed CSAPR on August 2, 2010. 75 Fed. Reg. 45210. The proposed CSAPR was intended to address Section 110(a)(2)(D)(i)(I) of the CAA and the remand of CSAPR's predecessor, the Clean Air Interstate Rule ("CAIR"). See North Carolina v. EPA, 531 F.3d 896 (D.C. Cir. 2008) ("North Carolina I"). The Court left CAIR in place while EPA developed a new rule to replace it. North Carolina v. EPA, 550 F.3d 1176 (D.C. Cir. 2008) ("North Carolina II").

CAA Section 110(a)(2)(D)(i)(I) requires states to control emissions from within their boundaries as necessary to prevent them from "contribut[ing] significantly to nonattainment in, or interfere[ing] with maintenance by, any other State with respect to any . . . national primary or secondary ambient air quality standard." CAIR consisted of a regional emission trading program for sulfur dioxide ("SO₂") and nitrogen oxide ("NO_x"), and set a region-wide emission budget based on the application of "highly cost effective" controls and allocated the budget to states based on heat input. North Carolina I, 531 F.3d at 904.

CSAPR similarly establishes interstate emissions trading programs for ozone-season and annual NO_x and for annual SO₂. EPA used a two-step process to determine which states are subject to the rule and the quantity of NO_x emissions that EGUs in those states must eliminate. First, EPA used the Comprehensive Air Quality Model with Extensions to identify downwind nonattainment and maintenance receptors and to model contribution from upwind states to those identified receptors. If a state's emissions were modeled to contribute "greater than 1 percent of

the relevant NAAQS” (0.8 parts per billion (“ppb”) for ozone) at any downwind site in future years, the upwind state and the downwind site were considered “linked.”

Second, for linked states EPA identified each state’s significant contribution and interference with maintenance by using what EPA called “maximum cost thresholds, informed by air quality considerations.” 75 Fed. Reg. 45233. This involved modeling the reductions available at various cost thresholds, then selecting a cost threshold based on a multi-factor assessment purportedly considering costs and air quality, and finally determining state budgets for emissions that achieve the required emission reductions at the selected cost threshold. *Id.* at 45272-274.

EPA’s history of conclusions regarding whether Florida emissions are impermissibly impacting (i.e., linked) to another state are grossly inconsistent. To recap, EPA did NOT include Florida among the states subject to the Ozone Transport Assessment Group recommendations, did NOT include Florida in the NOx SIP Call, did NOT include Florida in the proposed CAIR, and only included Florida in the final CAIR because of a questionable link to the Atlanta area. In the proposed CSAPR, EPA determined that for ozone Florida had a nonattainment linkage to the Fort Worth and Houston, Texas areas (Florida barely met the linkage threshold, with EPA reporting Florida’s largest contribution to nonattainment as 0.8 ppb) and maintenance linkages to the Atlanta, Georgia, and Houston, Texas areas (based on a maximum contribution of 2.1 ppb). 75 Fed. Reg. 45267-268. In the final CSAPR, EPA determined that for ozone Florida had no linkages to nonattainment receptors and only had a maintenance linkage to the Houston, Texas area; Florida’s impact on Atlanta and Fort Worth was apparently resolved. 76 Fed. Reg. 48245. Curiously, EPA states that Florida’s maximum impact on Houston increased to 3.6 ppb (from 2.1

ppb), despite EPA decreasing Florida's emissions from electrical generating units ("EGU(s)") by over 60 percent from the proposed CSAPR. 76 Fed. Reg. 48250; 75 Fed. Reg. 45268.

Similar to EPA's convoluted history of linkage determinations, EPA's budget allocation determinations for Florida have also varied wildly. Under the CAIR ozone-season program, Florida was allocated a 2009-2014 budget of 47,912 allowances. In the proposed CSAPR, EPA's modeling projected Florida's 2012 baseline ozone-season NOx emissions at 101,000 tons and that at a cost increment of \$500/ton, ozone-season NOx emissions would be reduced to 74,000 tons. 75 Fed. Reg. 45286. For the entire region, EPA's modeling in the proposal projected baseline ozone-season NOx emissions of 746,000 tons with reductions at \$500/ton of 98,000 tons; Florida represented 27.5 percent of that reduction. Id. However, in the proposed CSAPR EPA did not rely on this modeling to determine Florida's ozone-season NOx budget. Rather, EPA determined that state ozone-season NOx budgets based on \$500/ton reductions would be more representative if based on a combination of historical heat input and emission rates. 75 Fed. Reg. 45290-291. Using this methodology, EPA reduced Florida's proposed CSAPR ozone-season NOx budget to 56,939 tons. Id.

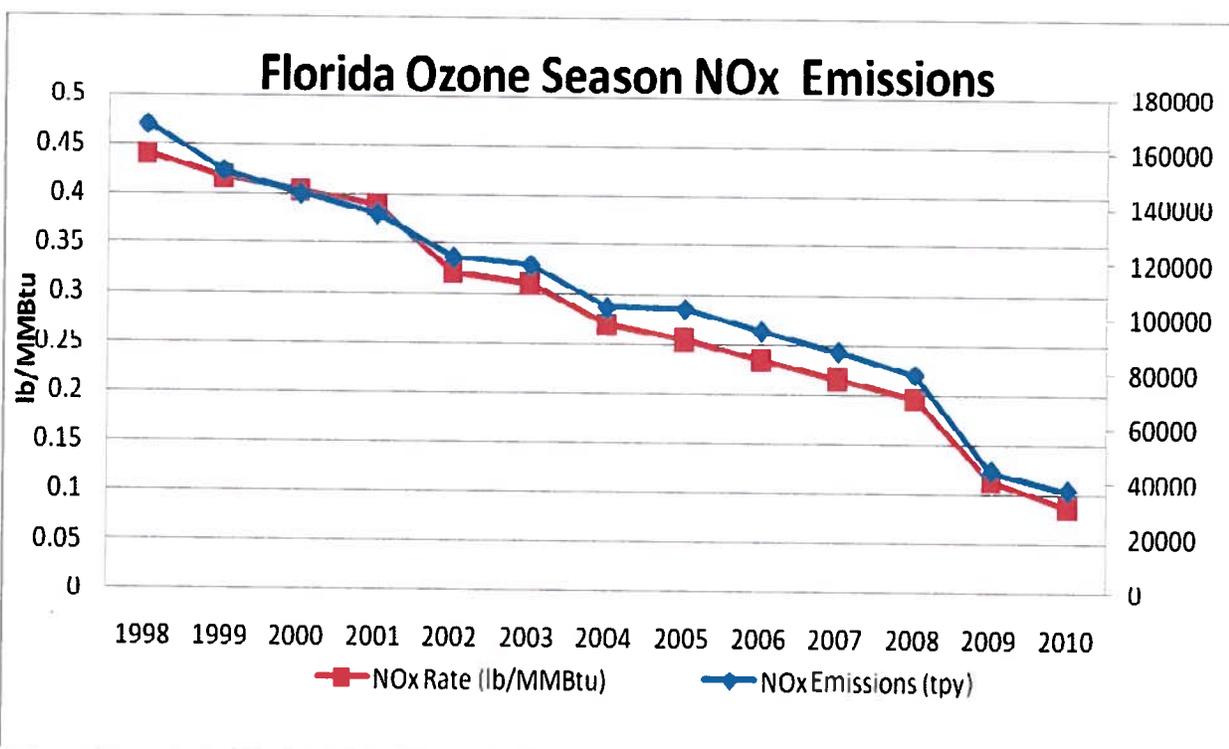
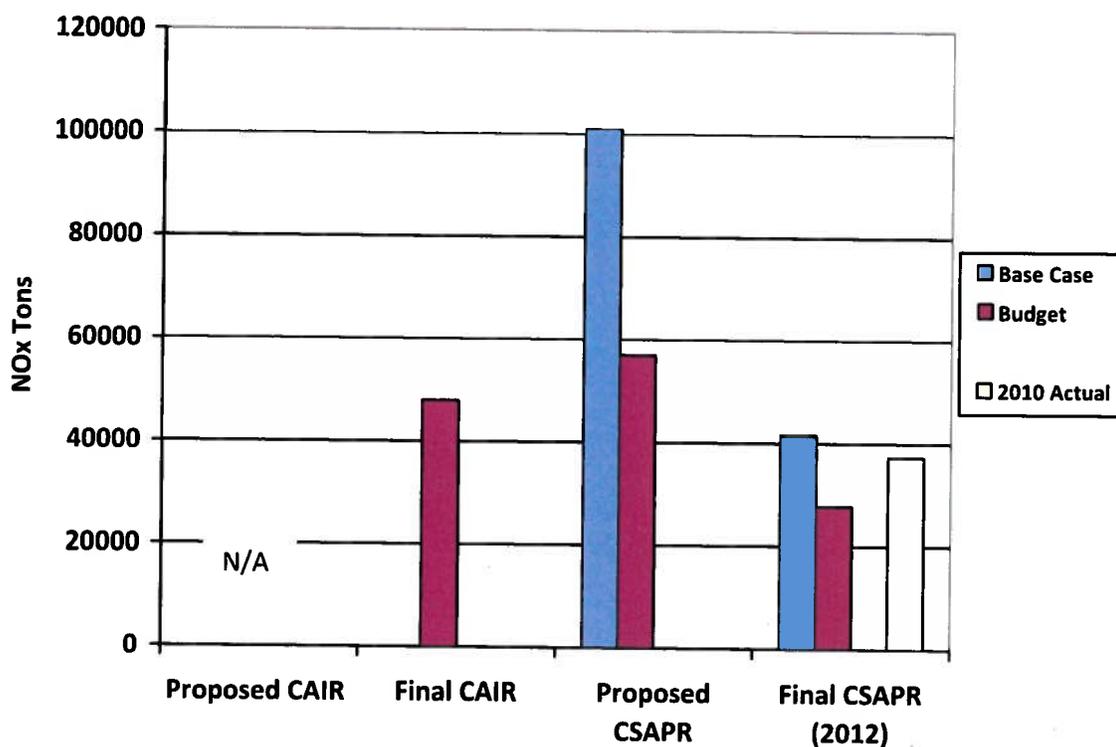
In the final CSAPR, EPA projected Florida's 2012 baseline ozone-season NOx emissions at 41,646 tons and that at \$500/ton, Florida's emissions would be reduced to 27,825 tons. 76 Fed. Reg. 48250; 48262. For all states in the CSAPR ozone-season program, EPA's modeling in the final CSAPR projected total baseline ozone-season NOx emissions of approximately 523,000 tons with total ozone-season NOx reductions of approximately 19,000 tons from all states at \$500/ton in 2012. 76 Fed. Reg. 48250-51. Florida's share of that reduction was projected at approximately 15,000 tons, or nearly 79 percent of the total reduction achieved from all states combined. Id. For states linked to the Houston area (Florida's only linkage), the final CSAPR

results in reductions of approximately 17,000 tons; Florida's 15,000 ton share equates to approximately 88 percent of that total.¹ 76 Fed. Reg. 48,246; 48250-51.

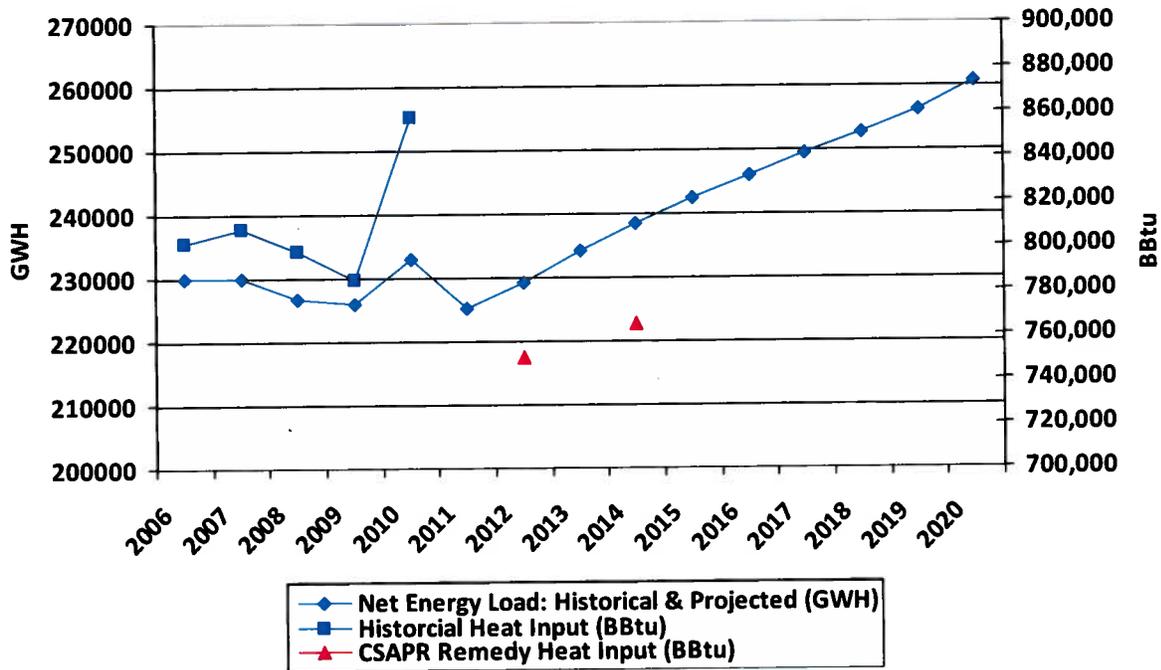
Between the proposed and final CSAPR, EPA reduced Florida's baseline emission projections by approximately 60 percent and reduced Florida's NOx ozone-season budget by approximately 50 percent. Moreover, Florida's final allowance budget is (forever) nearly 30 percent less than actual 2010 emissions, which are already at historic lows having been reduced by 50 percent since 2008 and by nearly 80 percent since 1998. EPA's drastic budget reduction also incredulously projects that Florida's 2012 heat input will be approximately 13 percent less than actual 2010 levels – a reduction of approximately 108 trillion Btus (from 858.133 to 750.063). Based on EPA's modeled NOx emissions and heat inputs, EPA is projecting an average state NOx emissions rate of 0.074 lb/mmBtu in 2012, versus an actual 2010 average of 0.087 lb/mmBtu, or an approximate 15 percent reduction from 2010. This is well below the equivalent rate used for other states, further demonstrating the burden placed on Florida to reduce emissions an additional 30 percent.

¹EPA's projected ozone-season program NOx emissions reflected in Table VI.B-2 of CSAPR vary slightly from the final ozone-season budgets as those final budgets apparently take into account interactions with the SO₂ and annual-NOx CSAPR programs. See Significant Contribution and State Emissions Budgets Final Rule Technical Support Document (July 2011), Table B-3; 76 Fed. Reg. 48250-251, Table VI.B-2

Florida Ozone-Season NOx Budgets and Emissions



Florida Historical & Projected Energy Demand, Historical Heat Input, and CSAPR Projected Heat Inputs



The changes EPA made to its modeling and state budget determinations in the final CSAPR are drastic and were unforeseeable, based on the information provided in the proposal, as are the impacts and issues raised by such changes. The Office of Management and Budget (“OMB”) directly raised this issue to EPA, specifically questioned whether states will be prepared to comply by CSAPR’s impending January 1, 2012, effective date.

GROUND FOR RECONSIDERATION AND STAY

I. EPA Failed to Provide Required Notice-and-Comment Opportunities

EPA failed to comply with the Administrative Procedure Act and CAA notice-and-comment requirements with respect to the final CSAPR, specifically regarding its methodology for establishing state allowance budgets, and the dramatic change in state budgets between the proposed and final CSAPR, as well as the material consequences of these changes. The CAA requires EPA to provide notice of a rule’s basis and purpose, including (i) the factual data on

which the proposed rule is based, (ii) the methodology used in obtaining and analyzing the data, and (iii) the major legal interpretations and policy considerations underlying the proposed rule. CAA § 307(d)(3); see also Small Ref. Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 518-519 (D.C. Cir. 1983) (noting that the CAA requires a more detailed notice than is required under the Administrative Procedure Act). The purpose of rulemaking notice is to provide fairness and improve the rulemaking by allowing and considering comments. See e.g., Nat'l Black Media Coalition v. FCC, 791 F.2d 1016, 1022 (2d Cir 1986); Small Ref. Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 547 (D.C. Cir. 1983). The test for determining the adequacy of notice is whether the final rule is a “logical outgrowth” of the agency’s proposed rule. Small Ref. Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 543 (D.C. Cir. 1983).

Because of the dramatic change in the state budgets between the proposed and final rules, the final budget determinations in the final CSAPR cannot be considered a logical outgrowth of the proposed CSAPR. The material nature of EPA’s changes was expressly recognized by the OMB in its Summary of Interagency Working Comment on Draft Language under EO 12866

Interagency Review:

It is unclear if states and affected facilities will be prepared for a January 1, 2012, start date, especially given other changes that EPA is making in the [] final rule. For instance, **modeling results used in the final rule are substantially different than those in the original August 2, 2010 Proposed Rule and subsequent notices. . . . [T]he sheer magnitude of change to the budgets of all the states results in a significantly different rule than originally proposed. (emphasis in original).**

While EPA made significant changes to many states’ allowance budgets, EPA’s change to Florida’s NOx ozone-season budget is the largest in the ozone-season program, by far. Between the proposed and final CSAPR, EPA reduced Florida’s 2012 baseline emission projections by almost 60 percent, and reduced Florida’s 2012 statewide allowance budget by

29,114 tons (more than 50 percent). This reduction is more than twice the amount of any other state, in terms of the total number and percentage reduction; six state NOx ozone-season budgets actually increased between proposed and final CSAPR, and three states closer to Houston than Florida actually have higher emissions in the final CSAPR 2012 policy run than in the base case. See Air Quality Modeling Final Rule Technical Support Document (June 2011) (hereinafter the “Air Quality Modeling TSD”). Compare this to Florida’s final allowance budget, which is nearly 30 percent less than actual 2010 emissions, which are already at historic lows, having been reduced by 50 percent since 2008 and by nearly 80 percent since 1998. The FCG could not have possibly predicted this drastically different outcome based on anything in the proposed CSAPR. See International Unit v. Mine Safety and Health Administration, 407 F.3d 1250, 1259-1260 (D.C. Cir. 2005) (holding parties are not required to “divine [the Agency’s] unspoken thoughts” where final rule is “surprisingly distant” from the proposal).

The state allowance budgets are the central tenet of CSAPR, defining the state’s “significant contribution” that it must eliminate, and establishing the basis for unit-specific compliance requirements. For Florida, EPA determined in the final CSAPR that the required emission reductions “fully quantify [Florida’s] significant contribution to nonattainment and interference with maintenance.” 76 Fed. Reg. 48247. This was not EPA’s conclusion in the proposed CSAPR, where EPA stated it had not identified the total significant contribution that Florida must eliminate. 75 Fed. Reg. 45288. EPA’s dramatic and unpredictable changes to these budgets from the proposed CSAPR have left Florida with serious compliance and reliability issues. It is unacceptable for EPA to fail to provide an opportunity for notice-and-comment on such a central and impactful aspect of CSAPR. See Riverkeeper, Inc. v. EPA, 475 F.3d 83, 113 (2d Cir. 2007) (holding EPA failed to provide adequate notice-and-comment where

parties had opportunity to comment on methodology and data, but not on overridingly important result determined thereby). While the proposed CSAPR did include state-level budgets, the changes to those budgets disclosed for the first time in the final CSAPR are so drastic as to amount to no notice at all.

Not only did EPA fail to provide adequate notice of its final budget determinations, it also failed to provide adequate notice of the underlying methodology it utilized to develop those budgets. In the preamble to the proposed CSAPR, EPA notes that each state's ozone-season NO_x budget was developed using a methodology "based on a combination of historical heat input, historical emission rates, and where EPA expected new [Selective Catalytic Reduction ("SCR")] units between [proposal] and 2012, projected emission rates for those new SCR units." 75 Fed. Reg. 45290-291. EPA stated that using this "real data" was better than defining budgets based on IPM projections and made no indication that it was considering a different methodology. *Id.*

Subsequent to the proposed CSAPR, EPA issued several Notices of Data Availability ("NODA(s)") that addressed updates to data being used in CSAPR and other issues. However, EPA never suggested or indicated it might be considering a different budget-setting methodology. In fact, in EPA's final NODA issued on January 7, 2011, EPA states that "EPA is neither proposing any changes to nor accepting comment on the approach that will be used to identify . . . each state's emission budget. EPA took comment on this approach and the resulting state budgets in the proposed Transport Rule." 76 Fed. Reg. 1111. Yet, in the final CSAPR, without any prior notice, EPA did exactly what it explicitly stated it would not do – it relied entirely on IPM modeling to determine state ozone-season NO_x budgets and completely

abandoned its proposed methodology based on historical heat input and projected emission rates. 76 Fed. Reg. 48260.

EPA cannot state in a proposed rule that a certain approach is not being taken and then take that exact approach in the final rule without some notice that such an approach might be considered. See International Union v. Mine Safety and Health Administration, 407 F.3d 1250, 9-10 (D.C. Cir. 2005) (final rule including maximum velocity cap was not “logical outgrowth” where propose rule included minimum velocity cap and stated a maximum would not be included). EPA’s only statement in the proposed CSAPR was that IPM was not being considered as a method for determining state budget allowance allocations:

EPA believes that the actual performance units achieved in 2009 is more representative of expected emissions than what EPA modeled using IPM.

* * *

EPA believes that instead of defining the budgets based on IPM projections of what will happen when SCR units are turned on, it is better to use real data, therefore EPA has developed budgets based on a combination of historical heat input, historical emissions rates, and, where new SCR units are expected between now and 2012, projected emission rates for those new SCR units.

76 Fed. Reg. 45290-291. Nowhere does EPA suggest in the proposed CSAPR that it is considering IPM as a possible alternative to this methodology to set state budgets. See Small Ref. Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 548-49 (D.C. Cir. 1983) (requiring description of “the range of alternatives being considered with reasonable specificity” to allow interested parties to know what to comment on.).

Moreover, as described elsewhere in this petition, changes to the final CSAPR state budgets have consequences that cascade throughout CSAPR because of their central importance. Accordingly, these consequences and ramifications are equally unnoticed. In light of these problems and EPA’s failure to provide an opportunity to comment on these material changes

prior to publishing its final Cross-State Air Pollution Rule, EPA must grant reconsideration and comply with the CAA and Administrative Procedure Act public notice requirements.

II. EPA’s Modeling and Methodology Are Flawed

a. Florida Should Not be in CSAPR

EPA’s own modeling demonstrates that Florida should not be in CSAPR. Specifically, the maintenance issues at the two receptors to which EPA links Florida (sites 482010029 and 482011050) will be resolved without any of the emission reductions required by CSAPR, or its predecessor CAIR, including the drastic and disproportionate reduction-burden placed on Florida. EPA’s CSAPR creates an extraordinarily burdensome solution for a problem that no longer exists.

EPA included Florida in CSAPR based solely on modeled linkages to two maintenance-only receptor sites in Harris County, Texas; EPA did not link Florida to any other maintenance or nonattainment receptor. 76 Fed. Reg. 48246. For Harris County sites 482010029 and 482011050, EPA’s 2012 design values demonstrate that the two receptors to which Florida is linked barely even qualify as maintenance receptors:

	Nonattainment Receptor Determination		Maintenance-Only Receptor Determination	
	2012 Average Design Value	Average Value ≥ 85 ppb	2012 Maximum Design Value	Maximum Value ≥ 85 ppb
Site 482010029	84.2	No	85.4	Yes
Site 482011050	82.8	No	85.4	Yes

See 76 Fed. Reg. 48236, Table V.C-6; Air Quality Modeling TSD, Appendix B-30; B-31.

EPA then determined that Florida’s maximum contribution at these two receptors exceeded the 0.8 ppb ozone NAAQS threshold, and on the basis of this linkage EPA included Florida in the CSAPR ozone-season program.

Based on this methodology, EPA linked nine states (including Florida) to one or both of the Harris County maintenance-only receptor sites 482010029 and 482011050. 76 Fed. Reg. 48246. Among the nine states, Florida and South Carolina are included in CSAPR solely based on maintenance-only linkages to these sites. *Id.* The other seven states linked to either or both of the Harris County receptor sites 482010029 and 482011050 also have linkages to non-attainment receptors.

EPA’s modeling demonstrates that the drastic emission reductions CSAPR requires of Florida are completely unnecessary. EPA’s modeled design values show that by 2014, Harris County sites 482010029 and 482011050 no longer have a maintenance issue even without any CAIR- or CSAPR-related reductions.

8-Hour Ozone (ppb)						
	2012 Base Case Maximum Design Value	Maximum Value ≥ 85 ppb	2014 Base Case Maximum Design Value	Maximum Value ≥ 85 ppb	2014 Remedy Case Maximum Design Value	Maximum Value ≥ 85 ppb
Site 482010029	85.4	Yes	83.6	No	83.5	No
Site 482011050	85.4	Yes	83.7	No	83.6	No

See Air Quality Modeling TSD, Appendix B-30, B-31.

Moreover, the extraordinary burden imposed by CSAPR only accomplished 0.1 ppb reduction for these two Harris County sites; an unnecessary and inconsequential reduction achieved at great cost to Florida. Accordingly, there is no factual, legal, or policy basis for Florida to be in CSAPR.

Based on this analysis, it is clear that Harris County, Texas, does not have potential maintenance issues at sites 482010029 and 482011050 because of Florida-EGU emissions. Rather, potential maintenance issues at these sites are resolved by 2014 because of reductions from local and non-EGU sources. As Texas has recognized in its state implementation plan,

Houston's ozone nonattainment is the result of the local climate, large urban population and concentrated industry. See Houston-Galveston-Brazoria 1997 Eight-Hour Ozone Standard Attainment Demonstration SIP Narrative, page 1-1, available at http://www.tceq.texas.gov/airquality/sip/HGB_eight_hour.html. As common sense assumes, and EPA's data demonstrates, Florida EGUs have absolutely no significant impact on ozone NAAQS maintenance at Harris County sites 482010029 and 482011050.

To further illustrate this reality, the mobile source 2008 annual-NO_x emissions in Harris County alone (143,980 tons) dwarf the projected EGU 2012 annual-NO_x emissions for the entire State of Florida (91,072 tons). See 2008 National Emissions Inventory; Emissions Inventory Final Rule Technical Support Document (June 28, 2011). It is NO_x reductions in local and non-EGU sectors that solve any maintenance problem at Harris County sites 482010029 and 482011050, and certainly not any contrived significant contribution from Florida-EGU emissions. Between EPA's modeled 2012 and 2014 base cases, Florida EGUs are projected to actually increase NO_x emissions 9,000 tons and Texas EGUs are projected to increase emissions approximately 5,000 tons, but Florida non-EGUs are projected to decrease emissions by 55,014 tons and Texas non-EGUs are projected to decrease emissions by 134,000 tons. Id. Thus, EPA has no basis for claiming that Florida EGUs are interfering with maintenance of the ozone NAAQS at Harris County receptor sites 482010029 and 482011050.

Further, EPA's justification for insisting on requiring emission reductions based on its 2012 modeled data, as opposed to 2014, is untenable with respect to Florida. EPA selected 2012 as CSAPR's initial compliance deadline based on the Court's instruction in North Carolina I to "decide what date, whether 2015 or earlier, is as expeditious as practicable for states to eliminate their significant contribution to downwind nonattainment," 531 F.3d at 930, and based on

NAAQS attainment deadlines. Thus, for the 1997 ozone NAAQS, EPA explains that “[t]he 2012 deadline for compliance with the limits on ozone-season NO_x emissions is necessary to ensure that states with June 2013 maximum attainment deadlines get the assistance needed from upwind states to meet those deadlines.” 76 Fed. Reg. 48278.

However, the Houston area, which includes Harris County receptor sites 482010029 and 482011050, is subject to an attainment deadline of 2019, NOT 2013. 73 Fed. Reg. 56983. Thus, EPA’s rationale for insisting on a 2012 compliance deadline is inapplicable to Florida’s unique circumstances in the finalized CSAPR. EPA expressly acknowledges that its rationale is inapplicable to Houston, but provides no explanation or basis for insisting on a 2012 compliance deadline for Houston.² In light of these facts, Florida’s inclusion in CSAPR and the corresponding drastic emission reductions required of Florida can only be described as arbitrary and capricious.

b. Current Data Also Demonstrates that Florida Should Not Be in CSAPR

More current data than relied on by EPA demonstrates that the Houston area has neither an attainment nor maintenance problem with ozone NAAQS, and therefore Florida should not be included in CSAPR. Gregory Stella, a senior scientist and managing partner at Alpine Geophysics, LLC, recently provided testimony to Congress that Harris County, Texas, was neither a nonattainment or maintenance site as of 2009, based on more current data. See Exhibit A (attached); Table 2 and 3. These conclusions were based on state of the art modeling and 2007-2009 data that included CAIR-based reductions, as opposed to the older 2003-2007 data

² “With respect to ozone, some commenters noted that the proposed rule required ozone reductions by 2012 for states impacting areas which EPA’s analysis shows will attain the 1997 ozone NAAQS by 2014 without further controls. Those commenters questioned the importance of getting reductions in such states and whether the 2012 deadline is necessary. EPA disagrees with those comments. **Except for Houston**, all ozone areas within the region addressed by this rule have attainment dates no later than 2013. In effect, this means that emission reductions needed to attain the 1997 ozone NAAQS must be in place by the 2012 ozone season. EPA believes that if there are reductions available by 2012, and those emission reductions have in fact been identified, it is appropriate and necessary to ensure that those reductions are in place.” 76 Fed. Reg. 48279 (emphasis added).

relied on by EPA, which excluded any CAIR-based reductions. Further, actual monitoring data shows that Harris County's 2008-2010 design values achieve the 1997 ozone NAAQS standard.

See 2008-2010 Ozone Design Values, available at <http://www.epa.gov/oaqps001/airtrends/values.html>.

This information further supports the conclusion that EPA's inclusion of Florida in CSAPR based on linkages to Harris County receptor sites 482010029 and 482011050 is arbitrary and capricious, when: (1) current data, including CAIR-based reductions, indicates that there is no maintenance issue at either site as of 2009; and (2) EPA's own models demonstrate that, even excluding CAIR- and CSAPR-based reductions, these receptors no longer have maintenance issues by 2014.

EPA has argued that this current data is irrelevant, and it is only appropriate to rely on pre-CAIR data to model a future base case since CSAPR will replace CAIR; the base case should thus reflect "no-CAIR" conditions. 76 Fed. Reg. 48230. As discussed below in relation to EPA's premature imposition of a Federal Implementation Plan, EPA's own data and the Alpine Geophysics results demonstrate the superfluity of CSAPR and the fact that Florida (and other states) should be given an opportunity to develop a state implementation plan to codify the substantial reductions that sources in Florida have already achieved. Again, EPA has developed an extraordinarily burdensome solution to a problem that no longer exists.

c. The Results of EPA's Methodology Demonstrate That it is Flawed

The absurd results of EPA's models and methodology used in the final CSAPR demonstrate that they are flawed, as applied to Florida. See Chemical Manufacturers Ass'n v. EPA, 28 F.3d 1259 (D.C. Cir. 1994) (holding EPA determination arbitrary and capricious where results of model relied on by EPA did not match reality). And again, the FCG could not have

raised these issues previously because they only became apparent due to the substantial changes EPA made after the close of the comment period.

One absurd result of EPA's models and methods has already been discussed above: EPA's basic determination to include Florida in CSAPR for the ozone-season program based on resolved linkages to Harris County receptor sites 482010029 and 482011050. EPA's insistence that these two receptor sites be treated as downwind maintenance receptors as the sole basis for including Florida in CSAPR has no basis in reality or logic. As stated above, EPA reduced Florida's EGU-emissions by 60 percent from the proposal, yet Florida's max impact to Harris County increased from 2.1 to 3.6 ppb. Further Florida's max impact at the relevant receptors was 3.6 and 0.9 ppb. It defies common sense that a state hundreds of miles away can have such a disparate impact on receptors in the same county. These anomalies raise serious questions regarding the veracity of EPA's data, methodology and conclusions.

Further, even assuming Florida should be in CSAPR, Florida's final allowance budget further demonstrates the faulty nature of EPA's models and methodology. As noted above, current data demonstrates that all of Houston, including Harris County receptor sites 482010029 and 482011050, currently meet the 1997 ozone NAAQS. Further, Florida's NOx emissions have steadily been declining, with a 50 percent reduction between 2008 and 2010. Yet, EPA's models require a 30 percent reduction in emissions in Florida from 2010 actual levels. Mirroring that reduction, EPA's models incomprehensibly predict Florida's heat input levels in 2012 will be approximately 13 percent (108 trillion Btus) below 2010 levels.

A model and methodology that require such substantial emission reductions below current levels, when current data show the problem is remedied under existing conditions, can only be described as flawed. Nor has EPA adequately explained how Florida will be able to

meet generation needs with such a drastic reduction in emissions and heat input. EPA itself projects a roughly one percent annual increase in demand from historical 2009 levels. See Regulatory Impact Analysis for CSAPR (June 2011). By comparison, the Florida Reliability Coordinating Council (“FRCC”) predicts an annual average growth rate for Florida closer to 1.6 percent for the next 10 years. See Florida Reliability Coordinating Council 2011 Regional Load & Resource Plan (July 2011). It defies common sense to believe Florida’s budget reflects realistically achievable conditions when on the one hand projections show increasing demand and on the other require substantially reduced heat inputs.

d. EPA’s Reliance on Erroneous Data Results in an Under-Allocation of Allowances for Florida

EPA utilized erroneous data in its model that resulted in an under-allocation for Florida in the final budget. The FCG has already brought some of these errors to EPA’s attention in a September 30, 2011 letter. See Exhibit B (attached). Other errors include the fact that EPA’s model: (i) dispatches units such that each modeled region will meet its own projected demand, and does not consider state lines or service territories, (ii) assumes every company will operate in the best interest of the modeled region, as opposed to reliably and cost-effectively servicing its specific territory, (iii) fails to account for transmission constraints between facilities, and (iv) fails to account for “must-run” units for voltage requirements. Accordingly, EPA must grant reconsideration to further evaluate its modeling and methodology and address its anomalous results.

III. EPA Improperly Requires Disproportionate and Excessive Emission Reductions in Florida

CSAPR exceeds EPA’s statutory authority under section 110(a)(2)(D)(i)(I) of the CAA by requiring Florida to reduce its emissions beyond that required to assist downwind air quality.

The extent of this flaw is a result of EPA’s substantial changes in data, models and methodology, and thus could not have been evaluated until EPA released the final CSAPR. As applied to Florida, CSAPR requires a disproportionate and excessive reduction in EGU NOx emissions. As the Court held in North Carolina I, under section 110(a)(2)(D)(i)(I) “[e]ach state must eliminate its own significant contribution to downwind pollution. . . . [and EPA] may not require some states to exceed the mark.” 531 F.3d at 921 (emphasis added).

In the final CSAPR, EPA includes Florida in the NOx ozone-season program based solely on linkages to two different maintenance-only receptors in Harris County, Texas (482010029 and 482011050). See 76 Fed. Reg. 48236, Table V.C-6; 76 Fed. Reg. 48246, Table V.D.-9. EPA identified a totally of nine states, including Florida, with ozone maintenance linkages to one, or both, of these two receptors.

These states are listed in the table below, along with the maximum downwind contributions, the 2012 base case emissions, and the 2012 ozone-season remedy case emissions/budget at \$500/ton.

State	Largest Downwind Contribution at Receptor Sites 482010029 and/or 482011050	2012 Base Case Ozone Season NOx Emissions (thousand tons)	Ozone-Season NOx Reductions at \$500/Ton (thousand tons)	2012 Remedy Ozone Season NOx Emissions (thousand tons)	State Reduction as Percentage of State 2012 Base Case Budget	State Reduction as Percentage of Total Reduction for All States Combined
Louisiana	11.1 ppb	13	< 1	13	0%	0%
Florida	3.6 ppb	42	15	27	35.7%	88%
Mississippi	3.3 ppb	10	< 1	10	0%	0%
Alabama	2.8 ppb	34	< 1	34	0%	0%
Georgia	2.8 ppb	29	1	28	3.4%	6%
Tennessee	1.1 ppb	16	< 1	16	0%	0%
South Carolina	0.9 ppb	15	< 1	15	0%	0%
Kentucky	0.8 ppb	38	1	37	2.6%	6%
Illinois	0.8 ppb	21	< 1	21	0%	0%
	Total	523	17	506		

See 76 Fed. Reg. 48250-251, Table VI.B-2; Air Quality Modeling TSD, Appendix D.

Based on CSAPR's required reductions and EPA's modeling, EPA concludes that CSAPR has eliminated the requisite upwind contribution to Harris County maintenance receptors 482010029 and 482011050. 76 Fed. Reg. 48210. But, as explained above, EPA's base case projections show that maintenance issues at these two receptors are resolved without CSAPR (or CAIR), and especially without the reductions from Florida. With the CSAPR reductions, these receptors show impacts less than the maintenance-linkage levels, meaning that CSAPR has required more reduction than is necessary or that EPA is legally authorized to require. North Carolina I, 531 F.3d at 921 ("Each state must eliminate its own significant contribution to downwind pollution."); CAA § 110(a)(2)(D)(i)(I) (granting authority to prohibit only those emissions within a state which will contribute significantly to nonattainment or interfere with maintenance by another state).

It is unclear how EPA can define a significant contribution that must be eliminated when the maintenance receptors allegedly impacted have no maintenance issues even without CSAPR's reductions. Yet, as seen in the table above, EPA arbitrarily and capriciously determines that Florida is required to reduce an additional 15,000 tons of NOx as a result of CSAPR, out of a total of 17,000 tons of reductions from all of the states that EPA concludes impact the two Harris County maintenance receptors linked to Florida. Florida is therefore shouldering 88 percent of the purported benefit to these receptors, when these receptors issues are resolved without CAIR or CSAPR's help. This is a grossly disproportionate, unnecessary and excessive burden.

In addition, EPA's method of relying on cost thresholds to determine required state emission reductions is flawed. EPA may have some authority under Michigan v. EPA, 213 F.3d

663 (D.C. Cir. 2000), to use cost-effectiveness criteria in defining states “significant contribution” (in this case at reductions achievable at \$500/ton), but that authority only allows EPA to define the significant contribution to be eliminated as some lesser subset of a state’s actual contribution based on what portion can be cost effectively eliminated. North Carolina I, 213 F.3d at 917-918. As the Court in North Carolina I held, “EPA may ‘after [a state’s] reduction of all [it] could . . . cost-effectively eliminate[.]’ consider ‘any remaining contribution’ insignificant” and “EPA may require ‘termination of only a *subset* of each state’s contribution.’” Id. (quoting Michigan v. EPA, 213 F.3d 663 (D.C. Cir. 2000))(emphasis in original).

Thus, EPA has no authority to require a state to reduce more than its significant contribution just because EPA has determined it is capable of doing so at some “cost-effective” threshold; to do so clearly exceeds the limits of EPA’s authority under section 110(a)(2)(D)(i)(I). However, EPA failed to ensure that the state budgets and assurance provision caps eliminated only each state’s contribution and that no state was forced to reduce beyond its own significant contribution. This is apparently a result of EPA’s reliance on its region-wide cost thresholds to determine state budgets without also determining each state’s actual state-specific downwind impacts. EPA’s resulting budgets are thus unconnected to any state-specific analysis actually defining each state’s significant contribution beyond which reductions cannot be required regardless of cost-effectiveness. Without this, EPA cannot determine whether a state is being required to merely reduce some cost-effective subset of its downwind significant contribution as may be allowed under Michigan v. EPA, or is being required to eliminate its significant contribution to the limits authorized by section 110(a)(2)(D)(i)(I), or is being required to reduce emissions beyond that limit as the court expressly prohibited in North Carolina I. Specifically for Florida, EPA has not attempted to explain or demonstrate how the drastic emission

reductions required of Florida at the \$500/ton cost threshold only eliminate its significant downwind contribution to interference with maintenance, and not significantly more.

Further, EPA's own findings demonstrate that Florida is being required to make excessive emission reductions in excess of EPA's authority under section 110(a)(2)(D)(i)(I). EPA concluded in the final rule that CSAPR reductions quantify the "full responsibility [of Florida and South Carolina] under section 110(a)(2)(D)(i)(I), with respect to the 1997 ozone NAAQS," while also noting that certain states up-wind of Houston may be required to reduce emissions further.³ 76 Fed. Reg. 48210. Similar to Florida, South Carolina is included in the final CSAPR based solely on an interference with maintenance linkage to one of these two maintenance-only receptor sites. For the other seven states with Houston area linkages, EPA determined that they had linkages to other nonattainment receptors as well. EPA does not explain how it reached this conclusion regarding Florida and South Carolina. As noted above, EPA did not perform any state-specific analysis actually defining Florida or South Carolina's significant contribution to compare with reductions determined by EPA based on regional cost-curve reductions. However, ostensibly EPA concluded that Florida had satisfied its full responsibility under 110(a)(2)(D)(i)(I) based on EPA's projection that Harris County maintenance receptors 482010029 and 482011050 will no longer have a maintenance issue after implementation of CSAPR. See Air Quality Modeling TSD, Appendix B. However, as already noted, Florida bears a disproportionate burden of reductions among states linked to receptors 482010029 and 482011050, and some linked states are not required to reduce at all. Therefore, if CSAPR has remedied the upwind contribution from states linked to maintenance issues at

³ This was not EPA's conclusion in the proposed CSAPR. In the proposal, EPA stated that "[f]or states linked to ozone air quality problems in Houston or Baton Rouge, EPA has not yet identified a cost threshold for eliminating significant contribution. EPA does, however, propose to find that those states must make at least all of the reductions that can be achieved for \$500/ton in 2012." 75 Fed. Reg. 45288.

receptors 482010029 and 482011050, it has done so by requiring disproportionate and excessive emission reductions from Florida in excess of EPA's authority under CAA section 110(a)(2)(D)(i)(I).

Because the Harris County receptors at issue are resolved without any help from Florida, because the budgets are set based on a region-wide cost curve that does not determine each state's actual significant contribution, because Florida is required to reduce beyond its significant contribution, and because these flawed results could not have been known prior to EPA's release of the final CSAPR, EPA must grant reconsideration and address these flaws.

IV. EPA Failed to Properly Allow for State Implementation

EPA erred in issuing a federal implementation plan ("FIP(s)") for Florida and has not demonstrated that the conditions necessary for the issuance of a FIP have been met. Florida must be given an opportunity to codify the reductions that have already been achieved.

a. Background

On May 12, 2005, EPA adopted its final CAIR. On April 26, 2006, EPA published FIPs that were to serve as a regulatory backstop until the states revised their state implementation plans ("SIP(s)") to implement CAIR.⁴ A specific FIP for Florida was included. Later that year (August 15, 2006), EPA released Guidance for State Implementation Plan (SIP) Submissions to Meet Current Outstanding Obligations Under Section 110(a)(2)(D)(i) for the 8-Hour Ozone and PM_{2.5} National Ambient Air Quality Standards. In this guidance, EPA noted: "States within the CAIR region need not submit a separate SIP revision to satisfy the section 110(a)(2)(D)(i) requirements provided they submit a SIP revision to satisfy CAIR."

⁴ Additional revisions to CAIR were published December 13, 2006.

Florida submitted a revised SIP and on October 12, 2007, EPA published Approval and Promulgation of Implementation Plans; Florida; Clean Air Interstate Rule. 72 Fed. Reg. 58016.

In its approval document, EPA stated:

EPA has determined that the SIP revision fully implements the CAIR requirements for Florida. As a result of this action, EPA will also withdraw, through a separate rulemaking, the CAIR Federal Implementation Plans (FIPs) concerning sulfur dioxide (SO₂), nitrogen oxides (NO_x) annual, and NO_x ozone season emissions for Florida. 72 Fed. Reg. 58016. (emphasis added).

The Circuit Court of Appeals, D.C. Circuit, remanded CAIR to EPA on July 11, 2008, finding a number of deficiencies in EPA's final rule. North Carolina I and II (vacatur of rule reversed). In response to the remand, EPA published its proposed CSAPR followed by a final CSAPR on August 8, 2011. The final CSAPR imposed a FIP on Florida although Florida already had an EPA-approved SIP that EPA found fully implemented CAIR requirements.

b. EPA Does Not Have Authority to Issue a FIP in the Final CSAPR.

In response to the draft CSAPR, EPA received significant public comment warning that EPA cannot legally impose a FIP until the states were given the opportunity to submit SIP revisions to address the new requirements set out in the new rule. Commenters noted that many states, e.g., Florida, had already submitted, and EPA had already approved, SIP revisions such that the conditions necessary to justify a FIP had not occurred.

EPA's response is unpersuasive:

For each FIP in this rule, [] EPA either has found that the state has failed to make a required 110(a)(2)(D)(i)(I) SIP submission, or has disapproved a SIP submission. [] In addition, EPA has determined, in each case, that there has been no approval by the Administrator of a SIP submission correcting the deficiency prior to promulgation of the FIP. EPA's obligation to promulgate a FIP arose when the finding of failure to submit or disapproval was made, and in no case has it been relieved of that obligation. 76 Fed. Reg. 48219 (emphasis added) (internal citations omitted).

The “finding of failure” referred to is EPA’s April 25, 2005, determination that was supplemented with a technical support document released in July of 2011 that addressed Florida as follows:

On April 25, 2005 EPA made a finding of failure to submit a SIP to address the requirements of CAA section 110(a)(2)(D)(i) with respect to the 1997 ozone NAAQS (70 FR 21147) and has not, subsequent to that date, received and approved a SIP revision to correct the deficiency. On March 16, 2007, Florida submitted a SIP revision to, among other things, replace the CAIR FIP for the 1997 ozone NAAQS in Florida. This SIP revision incorporated the CAIR trading program for ozone-season NO_x into the Florida SIP. As noted in the preamble to the Transport Rule, following the D.C. Circuit decision in North Carolina, this CAIR SIP which was approved by EPA on October 12, 2007 (72 FR 58016), cannot be said to correct the 110(a)(2)(D)(i)(I) deficiency identified in the April 25, 2005 finding of failure to submit. In this action, EPA also is correcting and narrowing its approval of that SIP submittal. Based on these facts, the provisions of section CAA 110(c)(1) establish that the Administrator shall promulgate a FIP for the state of Florida addressing the requirements of 110(a)(2)(D)(i)(I) with respect to the 1997 ozone NAAQS. (emphasis added).

Even though Florida and twenty-one other States submitted CAIR SIP revisions, which were approved by EPA prompting EPA to withdraw its CAIR-based federal plans, EPA now takes the position in its final rule that the CAIR SIP revisions were no response at all and the States are just as delinquent in their filing of a SIP now as they were when three years passed in July of 2000 and when EPA issued its April 25, 2005 finding of failure to submit. EPA now asserts that the CAIR SIP revisions did not count, notwithstanding EPA’s approval of each and every one of them.

This is an incredulous position for EPA to take in light of the fact that twenty-two states received EPA approval of their CAIR SIP revisions—seven of which received approval of their SIP amendments after the court remanded CAIR back to EPA. Even after the appellate court

struck down CAIR, EPA continued to approve CAIR SIP revisions, and withdraw its CAIR-based federal plans, finding comfort in the court's remand "without vacatur." EPA relied upon the Court's opinion in North Carolina II (issued December 23, 2008) to continue to review and approve CAIR SIP revisions from Indiana, Maryland, North Carolina, Ohio, Pennsylvania, South Carolina and West Virginia. In each case, EPA emphasized that CAIR remained in effect and would continue to be implemented until new rulemaking was completed.

Consequently, Florida and twenty-one other states met their SIP obligations in response to CAIR which, by Court order, remained in effect and remained the applicable law until replaced by EPA's final CSAPR published August 8, 2011. EPA cannot credibly argue that the twenty-two states that filed CAIR SIP revisions have not revised their state plans to address the 1997 NAAQS.

EPA now asserts that these EPA-approved SIP revisions were based upon CAIR, CAIR was declared invalid, so the SIP revisions could not have cured the "deficiency" in CAIR. However, the "deficiency" to be cured was not the deficiencies underlying CAIR—the deficiency to be cured was failing to file any SIP revisions at all within three years of the 1997 NAAQS having been finalized. EPA approved Florida's CAIR SIP revisions on October 12, 2007. Consequently, Florida did indeed cure the deficiency as stated in EPA's 2005 "Finding of Failure to Submit."

A FIP is triggered by only two events: (1) the state fails to submit a required SIP or SIP revision;⁵ or, (2) EPA disapproves a state plan in whole or part. A state may avoid imposition of a FIP if two conditions occur: (1) the state corrects any outstanding deficiency; and, (2) EPA

⁵ Failure to submit includes providing EPA a submission that fails to meet minimum submission criteria under CAA section 110(c)(1)(A).

approves the plan or plan revision before the FIP is promulgated. EPA approved Florida's CAIR-based SIP revisions; no part of Florida's SIP was disapproved by the Administrator.

Since Florida did not have its plan or any part thereof rejected by EPA, and was never instructed to cure any deficiency in its SIP, any deficiency attributed to Florida necessarily had to be a "failure to file" deficiency. Once Florida submitted its SIP revisions, EPA approved those revisions and both prongs of CAA section 110(c)(1) were met; Florida (1) cured the deficiency regarding its failure to submit, and (2) EPA approved the plan.

Under EPA's new and novel theory, even though EPA approved the state plans, they all have become retroactively deficient based upon the Court's ruling in North Carolina I. There is simply no way to read the plain language of the CAA to come to this conclusion. It is clear from the plain language of section 110(c)(1) that EPA approval is contingent upon the curing any outstanding defect. Approval cannot occur unless EPA determines that the deficiency has been cured. Once Florida cured the deficiency and EPA approved the SIP revisions, Florida's SIP obligations ended as did EPA's obligation to impose a federal plan.

There is no poison pill provision in the CAA that would spontaneously and retroactively reinstate a "failure to submit" and allow EPA to impose a federal plan where State SIP revisions have already been approved. This is clearly a situation where new obligations have arisen from a new rule and the states are entitled to a period of time to revise their state plans under the SIP call provisions of the Act.

Accordingly, it is clear that the states acted in good faith and did indeed revise their state plans to implement the 1997 NAAQS based upon the then applicable CAIR requirements. Once EPA's CSAPR takes effect, CAIR will go away. However, EPA can no longer argue that the states failed to submit a SIP revision but only that the SIP revisions do not address the new

requirements in EPA's new (August 2011) rule. Under such circumstances, a SIP call pursuant to CAA section 110(k)(5) is the appropriate tool for requesting that the states once again revise their state plans to address EPA's new requirements. This provision allows a state up to 18 months to cure any deficiency.

In sum, EPA approved Florida's SIP, and Florida thereby satisfied the SIP requirements of section 110(a)(2)(D)(i), which includes section 110(a)(2)(D)(i)(I). If EPA believes that it has identified another SIP deficiency, it must issue a SIP call and allow Florida time to develop a remedy before it can issue a FIP.

c. EPA Must Allow Florida Time to Address Harris County, Texas

A SIP call is particularly appropriate in the case of Florida, which has never before been linked to Harris County, Texas, for 8-Hour ozone. 76 Fed. Reg. 48246. When CAIR was proposed, Florida was not included as a contributor to downwind non-attainment for 8-Hour ozone. When EPA published its final version of CAIR, Florida suddenly appeared in the rule listed as a contributor to nonattainment in Fulton County, Georgia. 70 Fed. Reg. 25249; 71 Fed. Reg. 25319. Florida's SIP revisions, and EPA's approval of the CAIR-based SIP revisions, did not and could not have addressed Harris County, Texas. Had Florida been given a chance to address this purported linkage, it might be able to show that the reductions already achieved are sufficient; as stated above, the current data supports this presumption. In sum, even if Florida could have anticipated the Court's ruling regarding CAIR, EPA cannot possibly hold Florida to have anticipated that it would be linked to Harris County, Texas, several years later.

This point highlights the weakness of EPA's theory that the CAIR SIP revision "didn't take" because of the deficiencies in CAIR. EPA is now asserting that it can impose a FIP upon

Florida although Florida has had no prior notice or knowledge of any linkage to Texas. The SIP call provision is very clear:

Whenever the Administrator finds that the applicable implementation plan for any area is substantially inadequate to attain or maintain the relevant national ambient air quality standard, to mitigate adequately the interstate pollutant transport described in section 7506a of this title or section 7511c of this title, or to otherwise comply with any requirement of this chapter, the Administrator shall require the State to revise the plan as necessary to correct such inadequacies. The Administrator shall notify the State of the inadequacies, and may establish reasonable deadlines (not to exceed 18 months after the date of such notice) for the submission of such plan revisions. CAA § 110(k)(5). (Emphasis added).

EPA failed to notify Florida that it now has been linked to nonattainment in Texas and in lieu thereof imposed a federal plan without meeting the conditions precedent for stepping in and taking action on behalf of the state. A SIP call is the appropriate vehicle to allow Florida an opportunity to revisit its state plan to account for this new information as to its purported downwind impacts upon Harris County, Texas. Accordingly, EPA must grant reconsideration to address this issue.

V. EPA Failed to Adequately Consider the Impacts of CSAPR

EPA has failed to adequately consider the reliability and economic impacts of CSAPR, as well as the combined impacts of CSAPR and many other pending or recently promulgated rules that are aimed at electric generating units. Because EPA provided no notice or opportunity to comment on Florida's final allowance budget, the FCG was also prevented from evaluating and commenting on those impacts.

Florida's drastically reduced final state budget has left a number of FCG members, and the state as a whole, with a significant allowance deficit. FCG members with significant shortfalls have few options but to consider curtailing operations, which could impact reliability,

or to purchase allowances or import power, which will be costly to FCG members and their Florida customers and are also unlikely to be available as real options. EPA has not adequately evaluated whether there will be any market for allowances in light of its severely reduced state budgets. This is demonstrated by the fact that the total of all state budgets for the 2012 ozone season (495,314) is significantly below the total actual ozone-season NOx emissions in 2010 (585,566). Neither has EPA adequately evaluated what the cost of those allowances might be. Further, EPA's flawed IPM modeling only considers Federal Energy Regulatory Commission ("FERC") regions, rather than states or service-territories, and thus overlooks significant intra-regional and local constraints related to transmission and reliability. As finalized, CSAPR poses very real concerns for Florida and its citizens. EPA's failure to account for these real-world issues makes its IPM modeling, and the rule that it supports, fundamentally flawed and arbitrary and capricious.

EPA also projects that Florida will have a roughly 1 percent increase in demand from 2009 levels of 3,914 billion kWh to 4,041 billion kWh in 2012, yet also incongruously projects that Florida's 2012 heat input will drop approximately 13 percent (108 trillion Btus) from 2010 actual heat inputs. See Regulatory Impact Analysis for CSAPR (June 2011); IPM Run Name "TR Remedy Final" parsed file, available at <http://www.epa.gov/airmarkets/progsregs/epa-ipm/transport.html>. The reality is that the FRCC predicts an annual average growth rate of closer to 1.6 percent over the next 10 years. See Florida Reliability Coordinating Council, 2011 Regional Load & Resource Plan (July 2011). EPA has provided no explanation for suggesting that Florida can meet a roughly 1 percent increase in demand each year from 2010 while reducing heat inputs by 13 percent, much less the 1.6 growth rate predicted by the FRCC. EPA's establishment of budgets based on erroneous projections could require emission reductions at a

level preventing companies from meeting both reliability and environmental compliance requirements. EPA must grant reconsideration to address, and allow the public to evaluate, this critical issue.

EPA has also failed to consider the cumulative impact of CSAPR along with the other numerous and extremely costly rules that directly impact the utility industry. Despite numerous and repeated requests by Congress and the FCG and other industry representatives, EPA continues to refuse to consider the cumulative impacts of all of its rules. By substantially changing the CSAPR budgets, EPA has prevented the public from evaluating and commenting on these impacts as well.

Each of EPA's initiatives individually will have a significant impact on the cost of electricity and transmission; combined, EPA's initiatives could have a crippling and irreparable impact. EPA has also refused to assess these rules' impact on our national economy (especially given these sensitive and volatile economic times), or the disproportionate impact on low- or fixed-income citizens, including the elderly and minorities. The following is a list of the more prominent rules at issue:

- (a) 2010 National Ambient Air Quality Standard for NO₂;
- (b) 2010 National Ambient Air Quality Standard for SO₂;
- (c) 2009 and 2013 National Ambient Air Quality Standard for Ozone;
- (d) 2011 National Ambient Air Quality Standard for PM_{2.5};
- (e) 2011 Utility MACT;
- (f) 2012 and 2013 Revisions to the Cross State Air Pollution Rule;
- (g) 2011 Industrial Boiler MACT;
- (h) Regional Haze Rule, including the Best Available Retrofit Technology Rule;
- (i) Greenhouse Gas PSD and Title V permitting;
- (j) Greenhouse Gas NSPS;
- (k) 2010 revisions to 40 CFR 63, Subpart ZZZZ;
- (l) 316(b) Cooling Water Intake structures;
- (m) Steam Electric Effluent Guidelines;
- (n) Numeric Nutrient Criteria;
- (o) Total Maximum Daily Load rules; and
- (p) Coal Combustion Residuals.

EPA's failure to consider the cumulative impacts of these rules is in direct contradiction to Executive Order 13563: "each agency must ... (1) propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs, . . . (2) tailor its regulations to impose the least burden on society, . . . taking into account . . . the costs of cumulative regulations." In the context of the Utility MACT, Congress asked EPA specific questions to backup its statements that it has coordinated with the Department of Energy, the Federal Energy Regulatory Commission, the National Electric Reliability Council, Public Utility Commissions, and Regional Transmission Organizations. EPA has yet to respond to this probing inquiry, and the public must be given an opportunity to review and comment on EPA's responses, especially in the context of the final CSAPR.

EPA must reconsider CSAPR to adequately evaluate and address these issues and adjust Florida's budget accordingly.

VI. EPA Did Not Provide Adequate Time to Comply

In light of the burden placed on Florida by CSAPR's final allowance budget, and because the Houston area attainment deadline (the only link for Florida) is not until 2019, EPA's insistence of a January 2012 effective date, and decision to begin applying variability assurance provisions in 2012 rather than 2014, is arbitrary and capricious. CSAPR's final allowance budget for Florida requires a nearly one-third reduction in emissions from actual 2010 levels. This obligation leaves a number of the FCG's members with insufficient allowances. Further, EPA's insistence on a 2012 compliance date means several longer-term compliance options, including installing controls, are unavailable. For some of the FCG's members, the combination of insufficient allowances and lack of time to pursue compliance options means their only hope of complying without de-rating units is to purchase allowances.

The viability of any market is in serious doubt, however, especially in light of EPA's drastic reductions in nearly all of the state budgets, and EPA's commitment to revise CSAPR based on the 2009 and 2013 revisions to the ozone standard. Further, EPA has exacerbated the issue by moving the variability assurance provisions from 2014 in the proposal to 2012, further restricting the compliance options for 2012 or 2013. In short, by severely under-allocating allowances to Florida, demanding compliance immediately, and applying variability assurance penalties immediately, EPA has deprived certain FCG members of any reasonable opportunity to comply.

EPA has offered no reasonable justification for this immediate, and unprecedented,⁶ compliance date. EPA states that it selected 2012 as CSAPR's initial compliance deadline based on the attainment deadline for the 1997 ozone NAAQS. EPA explains that "[t]he 2012 deadline for compliance with the limits on ozone-season NO_x emissions is necessary to ensure that states with June 2013 maximum attainment deadlines get the assistance needed from upwind states to meet those deadlines." 76 Fed. Reg. 48278. However, as explained above, the Houston area is subject to an attainment deadline of 2019, NOT 2013. EPA expressly acknowledges that this rationale is inapplicable to Houston, but provides no explanation or basis for continuing to insist on a 2012 compliance deadline.

Postponing CSAPR's effective date for Florida would not endanger the CAIR based reductions that Florida has already achieved. Per the Court's ruling in North Carolina II, CAIR remains in effect until EPA promulgates a valid replacement rule. 550 F.3d at 1178. Moreover, many of the controls installed by Florida utilities are subject to permit conditions that require their operation; increasing emission to pre-CAIR levels, as EPA seems to fear, is not an option.

⁶ EPA previously provided between 3.5 and 9.5 years to comply with the NO_x SIP call and CAIR. See 63 Fed. Reg. 57356 (Oct. 27, 1998) (providing 4.5 years for NO_x SIP call; 70 Fed. Reg. 25162 (providing 3.5 years for CAIR NO_x program and 4.5 and 9.5 years for the SO₂ program).

Thus, leaving CAIR in place while an appropriate effective date for CSAPR is determined will not result in any prejudice or harm.

In light of these facts, and the burdens associated with CSAPR's final allowance budget for Florida, EPA should reconsider the effective date of CSAPR, and repopulate and leave Florida's CAIR accounts in place until a more reasonable CSAPR effective date is established.

VII. EPA Should Stay the NO_x Ozone-Season Provisions for Florida

a. EPA Should Stay CSAPR's NO_x Ozone-Season Provisions Because "Justice so Requires"

Both the Administrative Procedure Act ("APA") and CAA provide the basis for an administrative stay of the ozone-season NO_x provisions in CSAPR. The APA provides that "[w]hen an agency finds that justice so requires, it may postpone the effective date of action taken by it, pending judicial review." 5 U.S.C. §705. Under section 307(d)(7)(B) of the CAA, "the effectiveness of the rule may be stayed during reconsideration by the Administrator . . . for a period not to exceed three months." 42 U.S.C. §7607(d)(7)(B). EPA has read the APA's "justice so requires" standard into section 307(d)(7)(B) of the CAA. See Ohio: Approval and Promulgation of Implementation Plans, 46 Fed. Reg. 8581, 8582 n. 1 (Jan. 27, 1981). Nothing in the CAA precludes EPA from using the APA stay provision. See 42 U.S.C. §7608(d)(1) (making no mention of section 705 of the APA in a list of APA provisions that do not apply for purposes of the CAA). Such a stay is necessary to provide EPA the time needed to correct material flaws in the final CSAPR, as highlighted in sections I-VI of this Petition.

Indeed, relying on the APA provision, EPA recently delayed the effective date for its Industrial Boiler ("IB") MACT Rule "until the proceedings for judicial review are complete" or "EPA completes its reconsideration" of the rule, "whichever is earlier." 76 Fed. Reg. 28662, 28,664 (May 18, 2011). In its stay, EPA noted that petitions for judicial review of the rule were

already pending. Id. EPA further explained that it intended to reconsider several issues in the final rule because “the public did not have a sufficient opportunity to comment on certain revisions EPA made to the proposed rule.” Id. at 28663. EPA also recognized that “thousands of facilities across multiple, diverse industries will need to begin to make major compliance investments,” which “may not be reversible if the standards are in fact revised following reconsideration and full evaluation of all relevant data.” Id. EPA thus concluded that justice so required a stay of the IB MACT Rule. Id.; see also 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 August 25, 2011)

Here justice similarly requires that EPA stay the effective date of CSAPR. Like the IB MACT rule, petitions for review are already pending. And, as the OMB recognized, the ozone-season NO_x allocations in the final CSAPR are “significantly [] than originally proposed.” Summary of Interagency Working Comments on Draft Language under EO 12866 Interagency Review, (posted July 11, 2011). The FCG was not given an opportunity to comment on these new ozone-season allocations – which are over 50% lower than the allocations in the proposed CSAPR – or EPA’s decision to change the methodology used to make the allocations. CSAPR’s unreasonably and unnecessarily short compliance deadlines also warrant a stay. The first compliance deadline under CSAPR is less than three months away. By contrast, EPA provided between 3.5 and 9.5 years to comply with the NO_x SIP call and CAIR. See Finding of Significant Contribution and Rulemaking for Certain States in Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone, 63 Fed. Reg. 57356 (Oct.

27, 1998) (providing 4.5 years between final rule and compliance deadline); 70 Fed. Reg. 25162 (providing 3.5 years for CAIR NO_x program and 4.5 and 9.5 years for the SO₂ program).

b. The test for judicial stay confirms that EPA should stay the ozone-season NO_x provisions of CSAPR

EPA has also looked to the four-part test used by federal courts to assess whether a stay is appropriate, although this is clearly not required by section 705 of the APA.⁷ The federal court test considers: (1) the movants likelihood for success on the merits; (2) the prospect of irreparable injury to the movant if a stay is denied; (3) the possibility of harm to other parties if a stay is granted; and (4) the public interest. See Washington Metro. Area Transit Comm'n v. Holiday Tours, 559 F.2d 841, 843 (D.C. Cir. 1977). “These factors interrelate on a sliding scale and must be balanced against each other.” Serono Lab., Inc. v. Shalala, 158 F.3d 1313, 1318 (D.C. Cir. 1998). For the final CSAPR, each of the factors weighs in favor of a stay

i. *The FCG is likely to succeed on the merits of its Petition for Review*

The FCG is likely to succeed on its Petition for Review of CSAPR before the D.C. Circuit for several reasons. As discussed in Sections I-VI above, EPA relied on flawed modeling and methodologies that resulted in the arbitrary and capricious inclusion of Florida in CSAPR; and resulted in an under-allocation of ozone-season NO_x allowances to Florida; failed to provide the FCG and its members adequate notice and an opportunity to comment on the dramatic changes to the methodology for determining state budgets and the state budgets themselves; took an ultra vires action by issuing a FIP as part of the final CSAPR instead of allowing states to first revise their SIPs; and improperly required Florida to carry a disproportionate and excessive share of the burden under the NO_x ozone-season provisions.

⁷ Specifically, even though irreparable injury will occur absent a stay, section 705 does not require EPA to consider this factor.

It is worth repeating that section 110(a)(2)(D)(i)(I) of the CAA allows EPA to require a state to eliminate its significant contribution to nonattainment in, or interference with maintenance by, a downwind state – but nothing more. 42 U.S.C. §7410(a)(2)(D)(i)(I); North Carolina I. Here EPA ignores this statutory limit on its authority. Florida is included in the ozone-season program because of alleged impacts to two maintenance receptors in Houston, Texas. Yet, EPA’s own modeling shows the maintenance issues at these receptors are resolved by 2014 regardless of any CAIR- or CSAPR-related emission reductions. This fact belies any assertion that Florida significantly contributes to maintenance issues at these downwind receptors. In addition, EPA’s reliance on region-wide cost thresholds to define state budgets wholly fails to determine actual state-specific downwind significant contributions to nonattainment or interference with maintenance. Without such state-specific analysis, EPA has no way of ensuring it is not requiring emission reductions in excess of its statutory authority. Furthermore, EPA linked eight other states to the same receptors in Houston. Florida, however, is responsible for almost 90 percent of the reductions to ameliorate the claimed harm to these downwind receptors. And, Florida must provide 79 percent of all emissions reductions under the overall NOx ozone-season program. Simply put, it is apparent that the reductions asked of Florida far exceed Florida’s contribution to any maintenance issues at these receptors, and requiring Florida to make these additional reductions violates the CAA. 42 U.S.C. §7410(a)(2)(D)(i)(I); North Carolina I, 331 F.3d at 907-08, 21; see also section III supra.

ii. *The FCG members will suffer irreparable harm if a stay is denied*

Absent a stay, the FCG members will be irreparably harmed. CSAPR will force the FCG members to (1) reduce electricity generation at units historically relied on to provide generation; (2) increase generation at peaking units not historically relied on for base-load capacity; (3)

increase generation at higher emitting, smaller units that are not subject to CSAPR; (4) decrease fuel diversity in a state susceptible to fuel curtailment because of storm events; (5) purchase emissions allowances to continue to generate electricity at current levels; (6) install additional control technologies or transmission lines; (7) operate existing control technologies longer; or (8) do some combination of 1-7. All of these options will force the FCG members and the Floridians who use their electricity to incur substantial costs that would not be incurred had EPA promulgated a valid rule. See Thunder Basin Coal Co. v. Reich, 510 U.S. 200, 220-21 (1994) (Scalia, J., concurring) (“[C]omplying with a regulation later held invalid almost always produces the irreparable harm of unrecoverable compliance costs”); Sottera, Inc. v. FDA, 627 F.3d 891, 899 (D.C. Cir. 2010) (same). The Florida Department of Environmental Protection has also expressed to EPA its serious concerns regarding the impacts of this rule on Floridians and Florida’s economic recovery as well as EPA’s immediate imposition of a FIP. See FDEP letter to Beverly Barrister, Director, EPA Region IV Air Division (Sept. 9, 2011) (attached hereto as Exhibit C).

Abrogation of the State of Florida’s right to implement the CAA will also cause irreparable harm. As the U.S. Supreme Court explained in New Motor Vehicle Board v. Orrin W. Fox Co., 434 U.S. 1345, 1351 (1977), a State’s interest “is infringed by the very fact that the State is prevented from engaging in” its regulatory process, and, further, “any time a state is enjoined from effectuating statutes enacted by representatives of the people, it suffers a form of irreparable injury.” Id.; see also California State Bd. of Optometry v. FTC, 1989 WL 111595 (D.C. Cir. 1989) (same). The FCG may rely on this irreparable harm to move for a stay. See Bond v. United States, 131 S. Ct. 2355, 2364 (2011) (“States are not the sole intended beneficiaries of federalism”).

iii. *Balance of harm and the public interest support a stay*

A stay of the ozone-season NOx provisions would not undermine the environmental goals EPA seeks to promote through CSAPR, especially as applied to Florida. Florida has cut its ozone-season NOx emissions in half between 2008 and 2010 while continuing to comply with CAIR. In fact, as explained above, recent emissions data show that Houston's air quality – which emissions reductions in Florida are meant to improve – is better than the 1997 ozone NAAQS and Houston does not have any nonattainment or maintenance receptors. See Exhibit A, pg. 13-14 (attached). Leaving CAIR in place while EPA reconsiders the issues discussed above will preserve these environmental benefits.

The public interest also favors a stay. EPA projects compliance costs for Phase I to be at least \$1.4 billion in 2012. See *Regulatory Impact Analysis for CSAPR*, pg. 255, 266 (June 2011). Actual compliance costs will likely be higher. The FCG expects, for example, that a limited supply of excess allowances will result in very high market prices for ozone-season NOx allowances. As of late August 2011, ozone-season NOx emissions were trading at \$3,750 per allowance. This is a 188 percent increase over EPA's projected 2012 cost of \$1,300 per allowance. As explained above, Florida has a deficit of approximately 9,500 allowances for 2012 (compared to 2010 actual emissions). At \$3,750 per allowance, and assuming no increase in emissions resulting from growth, this results in a cost of over \$35 million per year.

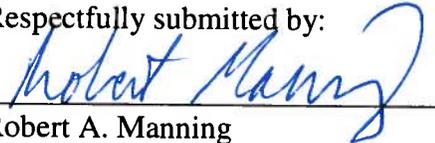
If allowances are too expensive or too few are available, companies must either derate units or shut the units down completely. Indeed, EPA estimates that CSAPR will result in a loss of about 4.8 GW of capacity – about one percent of all nationwide capacity. Id. at 262. Accordingly, a stay is warranted because the environmental goals will be preserved and the public harm in the absence of stay will be avoided.

REQUEST FOR RELIEF

Based upon the foregoing, the FCG requests that EPA immediately take action to:

1. Grant reconsideration regarding the provisions of CSAPR discussed above, and provide the public an opportunity to meaningfully participate in the rulemaking process.
2. Stay CSAPR as it applies to Florida pending the outcome of this Petition;
3. Stay the decision to remove CAIR allowances from individual accounts in EPA's Allowance Management System on October 14, 2011.
4. Such other relief as may be appropriate.

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Written Testimony

Gregory Stella

Alpine Geophysics, LLC

U.S. House of Representatives Committee on Science, Space, and Technology

September 15, 2011

Mr. Chairman and members of the Committee, thank you for giving me the opportunity to testify today regarding the results of two, recent independent analyses that my firm, Alpine Geophysics, LLC has conducted on behalf of the Midwest Ozone Group. These two studies utilized state-of-the-science data, methods and models to provide (a) an emissions and air quality trends picture for a recent ten year period, (b) residual ozone and particulate matter nonattainment results for a 12km modeling domain (study area) over much of the central, Midwestern and northeastern United States and (c) a list of nonattainment and maintenance monitoring sites for 2012 which based on air quality observations from 2006 through 2009, were determined to already achieve attainment of the target National Ambient Air Quality Standards (NAAQS) in EPA's Proposed Transport Rule (75 FR 45210; PTR) and final Cross-State Air Pollution Rule (76 FR 48208; CSAPR).

Introduction

On August 2, 2010, the U.S. Environmental Protection Agency (EPA) issued *Federal Implementation Plans To Reduce Interstate Transport of Fine Particulate Matter and Ozone; Proposed Rule* stating that:

EPA is proposing to limit the interstate transport of emissions of nitrogen oxides (NOX) and sulfur dioxide (SO2). In this action, EPA is proposing to both identify and limit emissions 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 (PM2.5) national ambient air quality standards (NAAQS) and the 1997 ozone NAAQS.

In support of this proposal (and resulting final rule), EPA developed and processed base year 2005 and future year emission inventories from multiple source categories with emissions and air quality models to determine relative contributions to downwind nonattainment and to simulate changes in air quality as the result of control strategy implementation.

Alpine conducted two separate studies to compare with the findings of the proposed EPA rule. Specifically, we have identified two major areas in which our assessment differs markedly from that conducted by EPA. Firstly, EPA did not use the most recently available emissions inventories and air quality measurements at the time of its rulemaking, and secondly, EPA did not account for the air pollution controls and related emission reductions that have been or are being installed to satisfy the requirements of the Clean Air Interstate Rule (or CAIR).

The first project was designed to quantify historical changes in ozone and particulate matter precursor emissions and the associated changes in air quality attributed to those emissions changes from a ten year period covering 1999 through 2009. The second analysis was designed to develop a residual ozone and particulate matter nonattainment picture for a study area over much of the eastern United States utilizing more recent emissions and air quality data and an alternate 'Business As Usual' future year scenario for 2014 and 2018 (comparable to EPA's Clean Air Interstate Rule or CAIR) that were simulated by EPA in support of its proposed rules and to additionally use these more recent design value data to determine which of EPA's identified nonattainment or maintenance sites were actually already in attainment with the NAAQS based on observations from 2006-2009.

Emissions and Air Quality Trends

The objective of our first project was to develop and present publicly available information on trends in emissions and ambient air quality in the United States over the period 1999 through 2009 in easy to understand visual and tabular formats. In addition to the quantitative historical summary provided, we included a qualitative assessment of meteorological influences on these trends as available for temperature and rainfall anomalies. Our metrics were developed for the United States using sub-regional groupings of States (Figure 1).



Figure 1. Sub-regional state groupings for emissions and air quality trends analysis.

We collected and processed publically available EPA emission inventories¹ for years within the study period of interest (1999-2009) by pollutant and source category to develop the trends for the analysis. To improve the year to year quantification of emissions, we augmented the EPA data with year specific continuous emissions monitoring (CEM) emissions (2002 through 2009) and year specific wildfire emissions data (2005 through 2008). Categories were grouped in our study as follows:

- electric generation (EGU) coal fuel combustion,
- electric generation non-coal fuel combustion,
- industrial fuel combustion,
- other fuel combustion,
- industrial processes,
- on-road vehicles,
- non-road engines and vehicles, and
- miscellaneous (including wildfire, prescribed fire, agricultural activities, etc.).

Our findings (examples provided in Figures 2 and 3) were comparable to EPA national level published reports² of emissions and air quality trends and confirm that in each region analyzed, we confirmed that all pollutants have decreased since 1999 in aggregate with some demonstrated intermediate year increases typically due to variability in year-to-year fire emissions. NO_x and SO₂ from electric utility fuel combustion sources show a significant decrease over time as a result of the Acid Rain Program, NO_x Budget Trading Program and CAIR control implementation. All pollutants (except ammonia) from the highway and off-highway vehicles categories show decrease over time as a result of various mobile source fuel and fleet rulemakings, including the Tier 2/Gasoline Sulfur rule and Heavy Duty Engine/Vehicle and Highway Diesel Fuel rules.

Correspondingly, we computed and summarized ozone and fine particulate matter (PM_{2.5}) design value trends for each region in the eastern United States for the same period of 1999 through 2009. These design values were calculated at both State and regional levels and for each three year period we computed the average of design values across all monitoring sites meeting data completeness requirements. The 8-hr ozone and 24-hr and annual particulate matter design values for each overlapping three-year period started with 1999-2001 and ended with 2007-2009 and were calculated based on EPA data handling conventions. Our results found that average 8-hr ozone and both the average annual and 24-hour PM_{2.5} design values have decreased in all five regions during the ten year period. (Figures 4, 5 and 6).

¹ <http://www.epa.gov/ttn/chief/eiinformation.html>

² <http://www.epa.gov/airtrends/index.html>

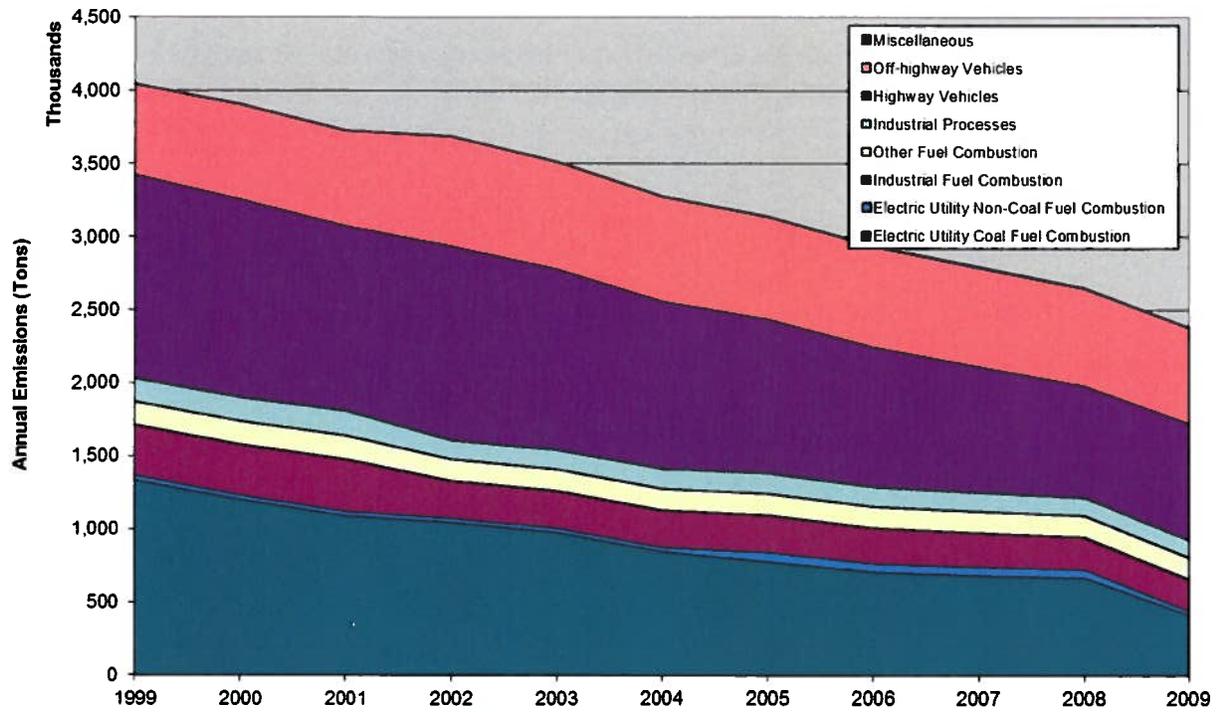


Figure 2. Midwestern states NOx emission trends.

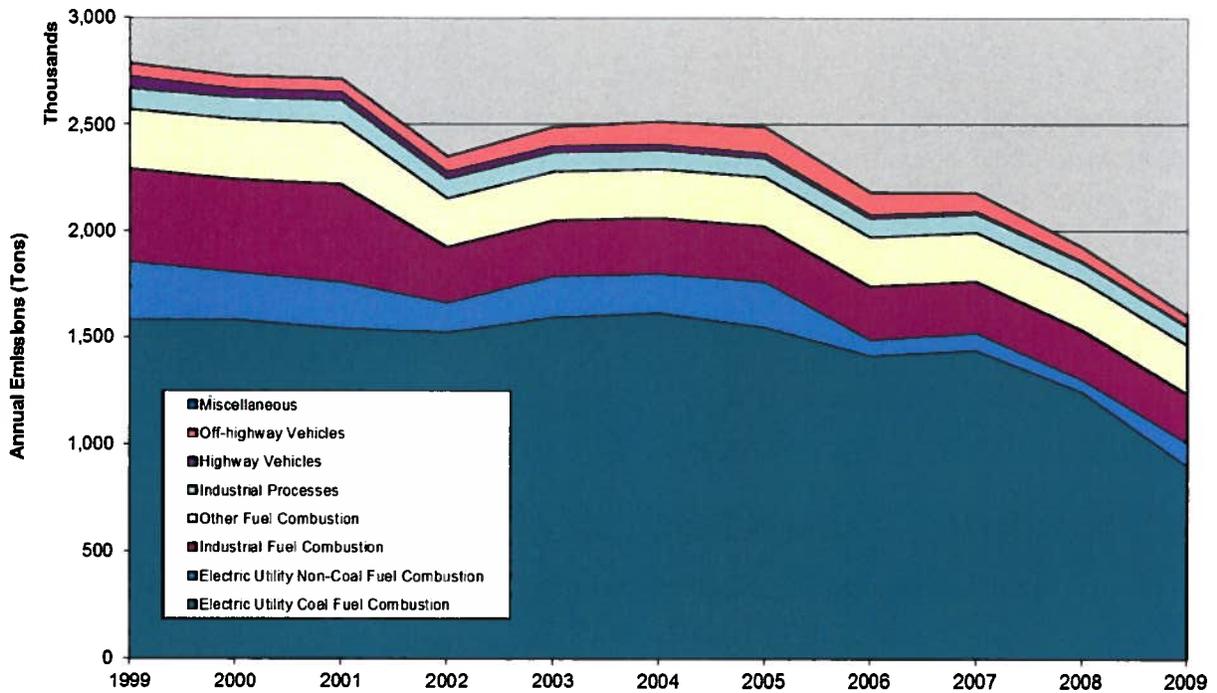


Figure 3. Northeastern states SO2 emission trends.

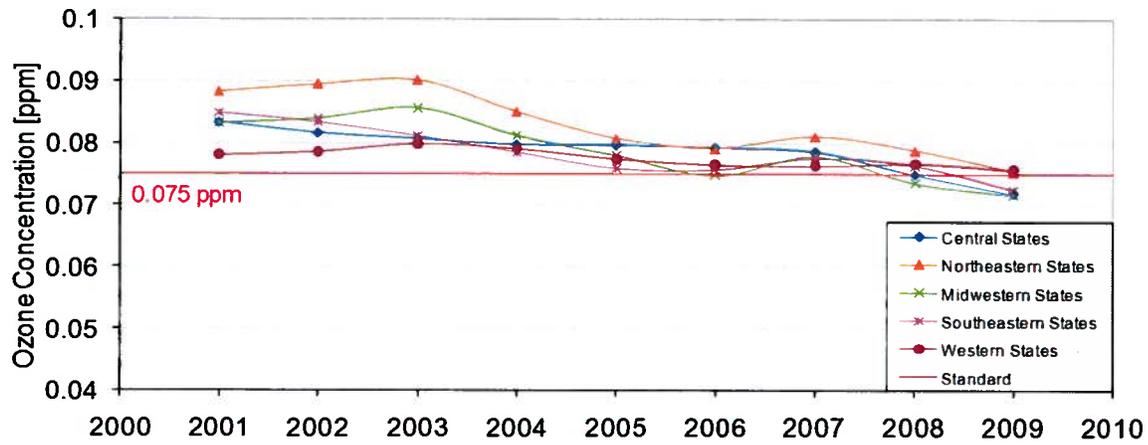


Figure 4. Regional average 8-hr ozone design value trends.

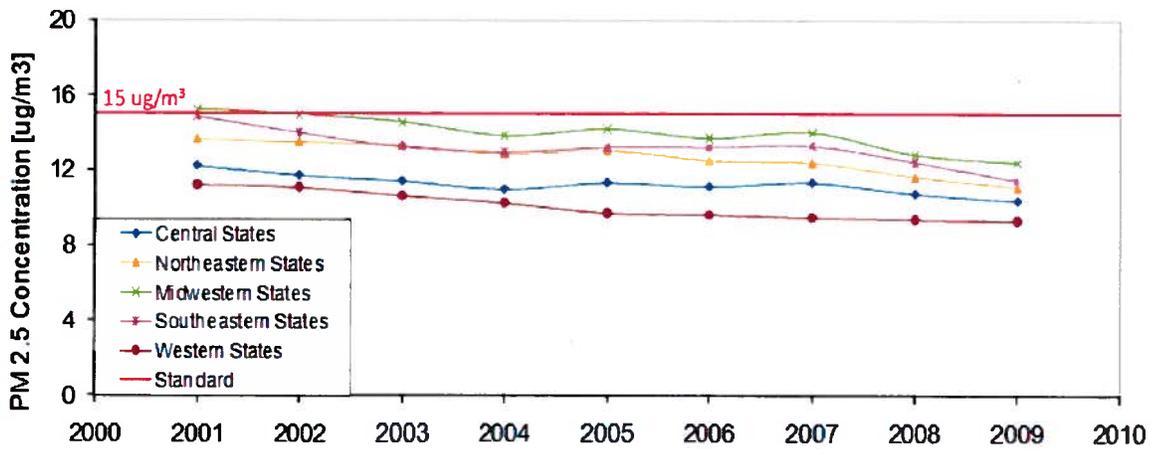


Figure 5. Regional average annual PM-2.5 design value trends.

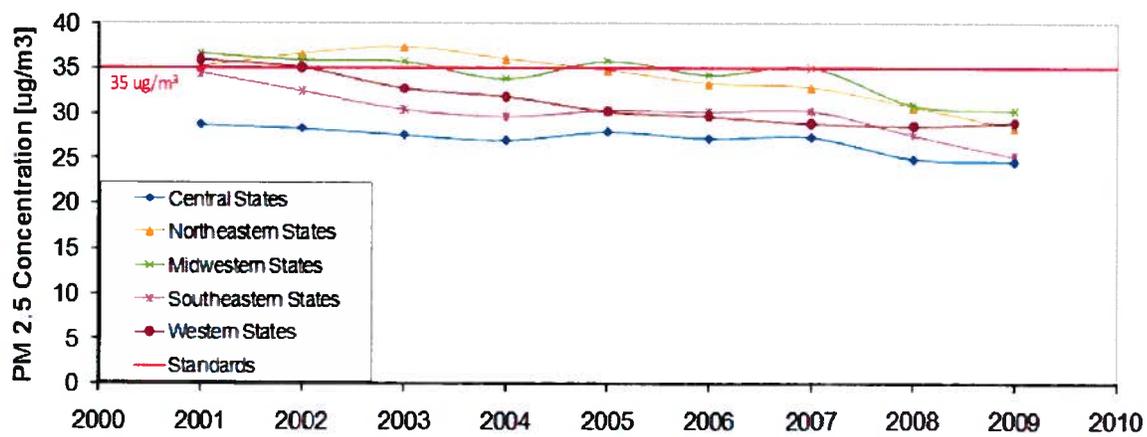


Figure 6. Regional average 24-hr PM-2.5 design value trends.

Ozone and Particulate Matter Attainment Modeling

The objective of our attainment modeling analysis was to perform technically credible photochemical modeling, including the EPA attainment test, for three key years: 2008, 2014, and 2018 for comparison with projections published by EPA in its rule proposals. Modeling for year 2008 served the important objective of providing a recent 'typical baseline' year for the purpose of calculating relative response factors (RRFs), which tie observed design values to the air quality modeled results. Most importantly, moving to 2008 took direct advantage of recent reductions in ozone and particulate matter design values measured across the eastern State study area (Figure 7) and the controls and related emission reductions that were already occurring in response to CAIR. Results of our work clarified when the effects of 'Business As Usual' (BAU) state and federal control programs would begin to significantly lower the 8-hr ozone and annual and daily PM design values at key monitors in the study area.

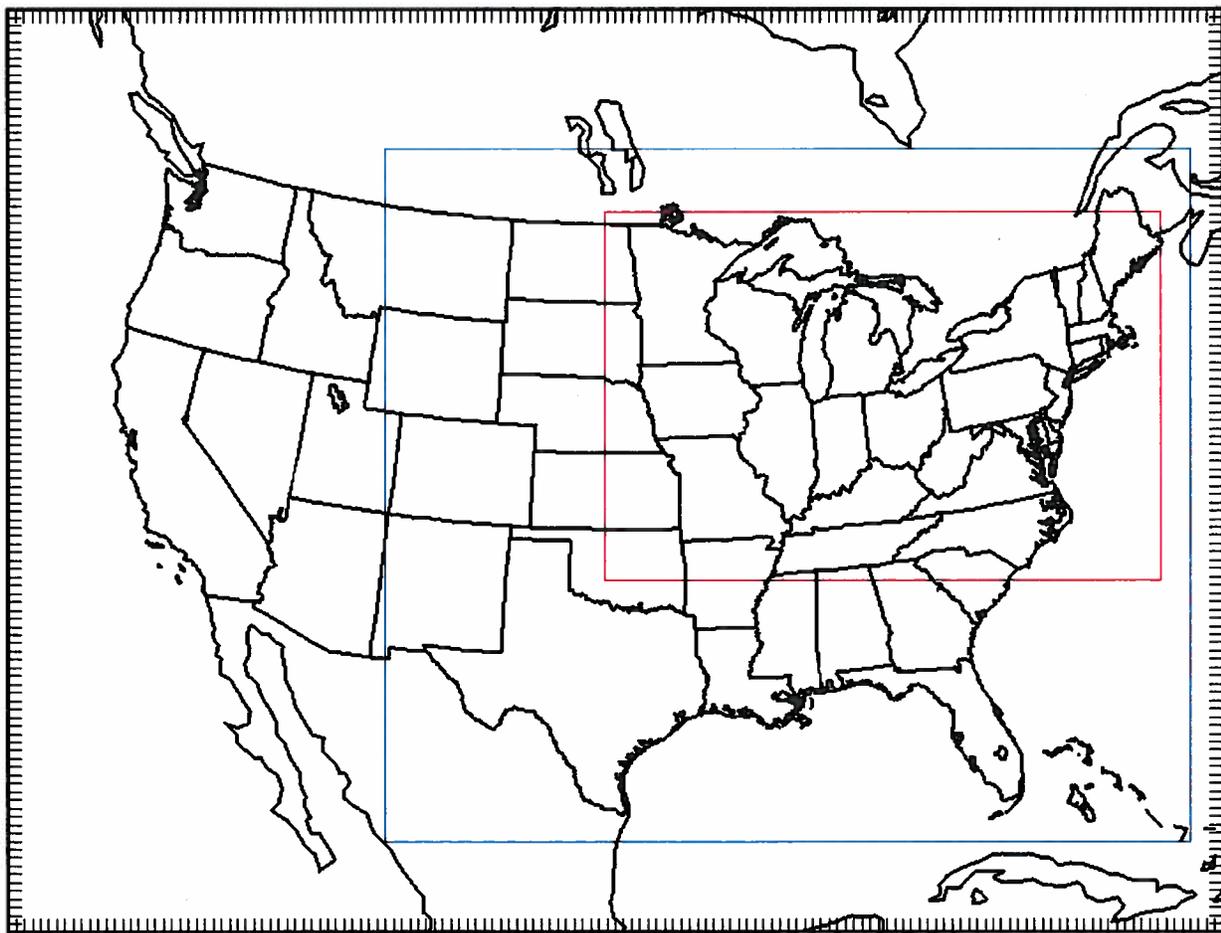


Figure 7. 36/12 km CAMx modeling domain. Red box represents eastern State study area.

We constructed the summer (8-hr ozone) and annual (PM_{2.5}) 2008 base year model performance evaluation inventories and future year 2014 and 2018 inventories using the most recent EPA 2005v4 data sets as the foundation. To these foundation files we updated the base year inventories to contain (a) 2008 Clean Air Markets Division (CAMD) CEM data for EGU sources (as reported under various programs and accounting for controls installed through 2008), (b) 2008 year specific vehicle miles traveled (run through the MOBILE6 tool to generate onroad emissions), (c) wild and prescribed fire emissions (from EPA's SMART Fire contract), and (d) biogenic emissions using a most recent version (v2.03a) of the MEGAN biogenics emissions model. All data that we used for the upgrades is and was available to and through EPA as it prepared its proposals.

The non-EGU future year inventories included all pertinent growth and control measures 'on the books' up to that year as provided by EPA's PTR data distribution³ as well as additional consent decree and local and state program data available at the time of our modeling. Additional growth and control data obtained from EPA were applied to EPA's 2005v4 to generate 2008 emissions and fill in the 2008 inventory in whole. In cases where growth and control data were not available, interpolations of EPA 2005 and 2010 inventories were used for 2008 emissions.

To determine future SO₂ and NO_x emissions for EGUs, we utilized output from the Emission-Economic Modeling System (EEMS), which is a modeling system that has been used by individual utilities and organizations to evaluate the economic and compliance implications of environmental policies and rules. EEMS is a computer model that was developed in 1997 to perform specific emission and economic analyses of environmental policies and regulations impacting the electric utility and coal industries. In general, EEMS uses a set of decision rules to identify a combination of control options (technology versus allowances) that approximates the least cost solution for a given utility system under a specific regulatory (e.g., trading) regime.

The SO₂ and NO_x emission forecast for this analysis ('Business As Usual') assumed compliance with the Clean Air Interstate Rule, as well as known utility agreements contained in Consent Decrees and State programs. The future regional electrical generation by fuel type and regional fuel forecasts that were incorporated into the model were from the Energy Information's Administration's Annual Energy Outlook 2009 (AEO2009) - Updated Reference Case⁴.

The modeling inventories developed for the 2008 base year and the 2014 and 2018 forecast years were prepared using the same technical methodologies as employed by EPA for the PTR and CSAPR. These inventories, founded upon the base and future year modeling analyses performed by EPA have undergone considerable QA by the agency and thus represent some of the best information available in the central and eastern United States for this regional modeling purpose. We feel that the resulting 'first principal' inventories are of sufficient technical credibility to justify their use in this regional analysis and are consistent with the inventories produced by EPA for the same purpose.

³ <http://www.epa.gov/airtransport/techinfo.html>

⁴ <http://www.eia.gov/oiaf/archive/aeo09/index.html>

We then examined the air quality impacts of the emissions prepared for the base year 2008 simulation and examined residual nonattainment in 2014 and 2018. The air quality modeling associated with this task had three primary objectives:

- Perform 2008 baseline and 2014 and 2018 future year modeling exercises with the Comprehensive Air quality Model with extensions (CAMx) v.5.20.1 modeling system setup at 36/12 km scale over the study area for 2008. These simulations shed light on the degree to which current controls and controls considered 'Business As Usual' provide for attainment of the PTR objective NAAQS.
- Use EPA's PTR attainment results with the new information produced for 2014 and 2018 to examine the rate at which residual ozone and PM nonattainment monitors come into attainment as planned federal and local controls begin to take effect in the out-years.
- Identify those areas, if any, for which residual nonattainment of the 8-hour ozone or annual/daily PM NAAQS are simulated in the future years.

In this analysis, we used measurements of ambient ozone and PM 2.5 data from several State and Federal monitoring networks. This includes data from over 500 ozone monitoring sites as well as over 500 Federal Reference Method (FRM) PM2.5 sites in the Eastern U.S. In addition, speciated PM2.5 data from the Chemical Speciation Network (CSN) and IMPROVE network were used to estimate PM2.5 species concentrations at each FRM site. The ambient data used in this analysis were obtained from EPA's Air Quality System (AQS).

The EPA modeling guidance⁵ recommends using the average of the three design value periods centered on the year of the base year emissions. Since 2008 was the base emissions year for the our modeling and design values were not yet available to represent the base year using the three design value periods centered on this year (2006-2008, 2007-2009, and 2008-2010), we used an alternate approach recommended by EPA.

An alternate EPA recommended averaging technique assumes that at least five complete years of ambient data is available at each monitor. In some cases there were less than five years of available data (especially at relatively new monitoring sites). In this case EPA recommends that data from the monitor is used if there is at least three consecutive years of data. If there are three years of data then the baseline design value will be based on a single design value.

For ozone, we used the design value period that straddled the baseline inventory year (e.g., the 2007-2009 design value period for our 2008 baseline inventory year). For both annual and 24-hr PM2.5, 2009 design value data were not yet available at the time of our analysis and so a design value period from a three year period which at least contained our base year in its range (2006-2008) was used.

⁵ <http://www.epa.gov/ttn/scram/guidance/guide/final-03-pm-rh-guidance.pdf>

Projection of Future Design Values and Determination of Nonattainment for Ozone and Annual and 24-Hour PM2.5

The EPA notes that the projection methodology for ozone and PM2.5 involves using the model predictions in a relative sense to estimate the change in concentration between 2008 and each future year scenario. For a particular location, the percent change in modeled concentration (the relative response factor (RRF)) is multiplied by the corresponding observed base period ambient concentration (DVb) to estimate the future year design value for that location (DVf).

Consistent with EPA methods of calculating future year design values in the PTR with the Modeled Attainment Test Software (MATS)⁶, we generated ozone and PM2.5 future design values and resulting nonattainment predictions using EPA default settings in the software package and with noted differences in design value period years chosen as noted above.

Results

The Modeled Attainment Test Software (MATS) v2.3.1 was used to implement the modeled attainment tests for particulate matter (PM2.5) and ozone (O3) for the air quality simulations conducted in this analysis. An update we made to the public distribution of this model was the inclusion of final 2009 ozone design value data as published by EPA in August 2010. These data were used in the attainment tests conducted for 8-hr ozone in the modeling domain. Most recent data distributed with the noted version of the software were used in the annual and 24-hr PM2.5 attainment tests.

Some of the key attainment findings of this latest study included:

8-hr Ozone Attainment Demonstration: Using 8-hr ozone design values calculated from 2007-2009 observational data sets, we found that only three counties in our study area exceeded the objective 1997 8-hr ozone NAAQS of 85 ppb in 2008. Our future year simulations of 2014 and 2018 indicated that all counties and monitors within the study area achieve 8-hr ozone attainment by 2014 and remain in attainment in 2018. From these results, we found that the ozone objectives of the proposed transport rule can be achieved with no new controls beyond BAU no later than 2014.

Annual PM2.5 Attainment Demonstration: Our modeling showed that all but nine counties in the study area were in attainment of the annual PM2.5 NAAQS in 2008. From this list, only one county (Allegheny County, PA) was found to remain in nonattainment of the 15.0 µg/m³ annual PM2.5 NAAQS in 2014 (16.6 µg/m³) and 2018 (16.2 µg/m³). From these results, the annual PM2.5 objectives of the proposed transport rule can be achieved with no new controls beyond BAU no later than 2014 with the possible exception of additional local controls at the Allegheny County, PA location. This site has been previously documented to be heavily influenced by emissions from local sources⁷.

⁶ http://www.epa.gov/scram001/modelingapps_mats.htm

⁷ Proposed Revision to the Allegheny County Portion of the Pennsylvania State Implementation Plan. Attainment Demonstration for the Liberty-Clairton PM2.5 Nonattainment Area. Allegheny County Health Department. February 22, 2010.

24-hr PM_{2.5} Attainment Demonstration: Our modeling showed that twenty-one counties in the study area are in nonattainment of the 24-hr PM_{2.5} NAAQS in 2008. From this list, only two counties (Allegheny County, PA and Brooke County, WV) were found to remain in nonattainment of the 35 µg/m³ 24-hr PM_{2.5} NAAQS in 2014 (51.2 and 38.0 µg/m³, respectively) and in 2018 (50.0 and 37.2 µg/m³, respectively). From these results, the 24-hr PM_{2.5} objectives of the proposed transport rule can be achieved with no new controls beyond BAU no later than 2014 with the possible exception of additional local controls at the Allegheny County, PA and Brooke County, WV locations.

Impacts of Updated Design Values on Determinations of Contributions to Nonattainment and Maintenance in the Proposed EPA Transport Rule

The EPA's Proposed Transport Rule and Cross-State Air Pollution Rule identify link between specific upwind states and downwind ozone or PM_{2.5} nonattainment areas based on photochemical modeling of the 2005 base year and two future years: 2012 and 2014. Model results for the base and future years are used to compute relative response factors (RRFs) equal to the ratio of predicted future year to corresponding predicted base year design values (DVs). These RRFs are then multiplied by DVs calculated from monitoring data for a base period centered on the 2005 base model year to obtain the predicted future year DV.

Two different base period DVs are calculated from observations: the average of DVs computed from measurements for periods ending 2005, 2006, and 2007 (i.e., average of the three design values for the three attainment periods 2003-2005, 2004-2006, and 2005-2007) and the maximum of these three base period DVs. RRFs and resulting predicted future year DVs were computed by EPA using the Modeled Attainment Test Software (MATS).

EPA's PTR and CSAPR identify two categories of ozone and PM_{2.5} monitoring sites based on the predicted future year DVs determined from MATS in the above manner:

1. "Nonattainment" sites are those monitoring sites for which the average of the three DVs is projected to exceed the NAAQS in 2012.
2. "Maintenance" sites are those monitoring sites that are not nonattainment sites as in (1) above but the maximum of the three DVs is projected to exceed the NAAQS in 2012.

EPA used source apportionment modeling to determine which states are predicted to contribute an amount in excess of 1% of the level of the NAAQS to ozone or PM_{2.5} at each downwind nonattainment or maintenance monitoring site defined in the above manner. Emissions from any such states are deemed to produce a "significant" contribution to either nonattainment or maintenance sites, respectively, of the ozone or PM_{2.5} NAAQS for purposes of the rule. Thus, significant transport couples are defined by EPA based on DVs calculated from observations made during 2003 – 2007. However, in late 2010, EPA released DVs based on observations from two more recent periods: 2006-2008 and 2007-

2009⁸. These more recent DVs reflect reductions in ozone and PM_{2.5} precursor emissions which have occurred since 2003-2007 and thus a reduction in the number of potential nonattainment and maintenance sites as defined above.

We examined EPA's list of nonattainment and maintenance monitoring sites for 2012 as defined in the PTR to determine which of these sites were actually already in attainment of the NAAQS based on observations from 2006-2009. Sites already in attainment based on these most recent data represent locations where transport from upwind sources is not contributing to nonattainment or maintenance problems. In performing this comparison, we used DVs calculated from annual summary statistics (e.g., annual fourth highest daily maximum 8-hour average ozone concentration) for 2006-2009. In some cases, insufficient data were available from which to compute the annual summary statistic. In these cases, we used procedures for filling in missing data similar to those used by EPA for computing air quality trends⁹. This is a conservative approach within the context of this analysis as DVs based on filled-in data may suggest a monitoring site is a nonattainment or maintenance site whereas MATS does not contain a DV for the monitoring site.

Results

Total counts of nonattainment and maintenance monitoring sites based on EPA's 2012 projections in the PTR versus nonattainment and maintenance sites determined from 2006-2009 data are provided in Table 1. These results show that over 80% of the sites predicted by EPA to be in nonattainment of the ozone or PM_{2.5} standards in 2012 are already in attainment as of 2009 based on an average of the 2006-2008 and 2007-2009 DVs. Furthermore, over 80% of the PM_{2.5} 2012 maintenance sites and 1/3 of the ozone 2012 maintenance sites are no longer maintenance sites as of 2009. These results indicate that air quality has improved more rapidly than predicted by EPA's PTR modeling.

We examined locations of monitoring sites projected by EPA to be nonattainment in 2012 which were observed to be in attainment as of 2009 based on averaging the 2006-2008 and 2007-2009 DVs. Table 2 lists all counties with such monitoring sites. Similarly, Table 3 lists all counties with monitoring sites projected by EPA to be maintenance in 2012 which were observed to be neither maintenance nor nonattainment as of 2009 based on 2006-2008 and 2007-2009 DVs.

⁸ Results presented here are based on EPA's final ozone and PM_{2.5} design values for 2006-2008, final ozone design values for 2007-2009 and 13 July 2010 draft PM_{2.5} design values for 2007-2009 (<http://epa.gov/airtrends/values.html>; <http://www.epa.gov/ttn/analysis/dvreview.htm>).

⁹ <http://epa.gov/airtrends/reports.html>

Table 1. Counts of nonattainment and maintenance sites¹⁰.

	Ozone	PM_{2.5} (Annual)	PM_{2.5} (24-Hour)
2012 Nonattainment Sites as predicted by EPA	11	32	103
2012 Maintenance Sites as predicted by EPA	15	16	44
2012 Nonattainment sites already in attainment based on 2006-2009 data	9	27	83
2012 Maintenance sites that are not maintenance or nonattainment sites based on 2006-2009 data	5	13	37

¹⁰ As determined from list of monitoring sites included in the PTR

Table 2. Counties projected by EPA to be nonattainment in 2012 which were observed to be in attainment as of 2009 based on averaging 2006-2008 and 2007-2009 DVs.

Ozone		PM (Annual)		PM (24-Hour)	
<i>County</i>	<i>State</i>	<i>County</i>	<i>State</i>	<i>County</i>	<i>State</i>
E. Baton Rouge	Louisiana	Bibb	Georgia	Jefferson	Alabama
Suffolk	New York	Clayton	Georgia	New Haven	Connecticut
Brazoria	Texas	Fulton	Georgia	Cook	Illinois
Harris	Texas	Cook	Illinois	Madison	Illinois
Tarrant	Texas	Madison	Illinois	Saint Clair	Illinois
		Saint Clair	Illinois	Will	Illinois
		Clark	Indiana	Clark	Indiana
		Dubois	Indiana	Dubois	Indiana
		Marion	Indiana	Knox	Indiana
		Jefferson	Kentucky	Lake	Indiana
		Wayne	Michigan	Marion	Indiana
		Butler	Ohio	Tippecanoe	Indiana
		Cuyahoga	Ohio	Vigo	Indiana
		Hamilton	Ohio	Scott	Iowa
		Allegheny	Pennsylvania	Daviess	Kentucky
		Beaver	Pennsylvania	Baltimore (City)	Maryland
		Lancaster	Pennsylvania	Monroe	Michigan
		York	Pennsylvania	Oakland	Michigan
		Cabell	West Virginia	St. Clair	Michigan
		Kanawha	West Virginia	Washtenaw	Michigan
				Wayne	Michigan
				Saint Charles	Missouri
				St. Louis City	Missouri
				Hudson	New Jersey
				Union	New Jersey
				Bronx	New York
				New York	New York
				Butler	Ohio
				Cuyahoga	Ohio
				Franklin	Ohio
				Hamilton	Ohio
				Montgomery	Ohio
				Summit	Ohio
				Allegheny	Pennsylvania
				Beaver	Pennsylvania
				Berks	Pennsylvania
				Cambria	Pennsylvania
				Cumberland	Pennsylvania
				Dauphin	Pennsylvania
				York	Pennsylvania
				Sumner	Tennessee
				Dane	Wisconsin

Table 3. Counties projected by EPA to be maintenance in 2012 which were observed to be neither maintenance nor nonattainment as of 2009 based on 2006-2008 and 2007-2009 DVs.

Ozone		PM (Annual)		PM (24-Hour)	
<i>County</i>	<i>State</i>	<i>County</i>	<i>State</i>	<i>County</i>	<i>State</i>
Dallas	Texas	Cook	Illinois	Camden	New Jersey
Harris	Texas	Jefferson	Kentucky	Union	New Jersey
		Cuyahoga	Ohio	New York	New York
		Hamilton	Ohio	Cuyahoga	Ohio
		Montgomery	Ohio	Lucas	Ohio
		Stark	Ohio	Mahoning	Ohio
		Berks	Pennsylvania	Preble	Ohio
		Berkeley	West Virginia	Stark	Ohio
		Hancock	West Virginia	Summit	Ohio
		Marion	West Virginia	Trumbull	Ohio
				Allegheny	Pennsylvania
				Davidson	Tennessee
				Brown	Wisconsin
				Milwaukee	Wisconsin
				Waukesha	Wisconsin

Summary and Conclusions

Our findings confirm that in each region analyzed, all ozone and particulate matter precursor pollutants have decreased since 1999 in aggregate with some demonstrated intermediate year variability typically due to specific year-to-year fire emissions. Additionally, our results show that average 8-hr ozone and both the average annual and 24-hour PM_{2.5} design values have decreased in all five regions of the continental United States during the ten year period from 1999 through 2009.

Photochemical modeling analyses, including the EPA attainment test, were conducted for three key years: 2008, 2014, and 2018. The modeling for year 2008 served the important function of providing a recent 'typical baseline' year for the purpose of calculating relative response factors (RRFs). Most importantly, moving to 2008 took direct advantage of recent reductions in design values measured across the study area and the use of current emissions inventory data made available from EPA and others which include the controls and related emission reductions that were already occurring in response to CAIR. Results of this work clarify when the effects of 'Business As Usual' state and federal control programs would begin to significantly lower the 8-hr ozone and annual and 24-hr PM_{2.5} design values at key monitors in the modeling domain.

The SO₂ and NO_x emission forecast for this analysis ('Business As Usual') assumed compliance with the Clean Air Interstate Rule, as well as utility agreements with regard to Consent Decrees and State programs. The future regional electrical generation by fuel type and regional fuel forecasts that were incorporated into the model were from the Energy Information's Administration's Annual Energy Outlook 2009 (AEO2009) - Updated Reference Case.

Using EPA attainment test software and algorithms with the output from our 'Business As Usual' air quality model simulations for 2008, 2014 and 2018, we concluded that the ozone objectives of the proposed transport rule can be achieved within our study area with no new controls beyond 'Business As Usual' no later than 2014.

We also concluded that the annual PM_{2.5} objectives of the proposed transport rule can be achieved within our study area with no new controls beyond 'Business As Usual' no later than 2014 with the possible exception of additional local controls at the Allegheny County, PA location.

Additionally, we concluded that the 24-hr PM_{2.5} objectives of the proposed transport rule can be achieved within our study area with no new controls beyond 'Business As Usual' no later than 2014 with the possible exception of additional local controls at the Allegheny County, PA and Brooke County, WV locations.

Finally, we concluded that that over 80% of the sites predicted by EPA to be in nonattainment of the ozone or PM_{2.5} standards in 2012 are already in attainment as of 2009 based on an average of the 2006-2008 and 2007-2009 DVs. Furthermore, over 80% of the PM_{2.5} 2012 maintenance sites and 1/3 of the ozone 2012 maintenance sites are no longer maintenance sites as of 2009. These results indicate that air quality has improved more rapidly than predicted by EPA's PTR and CSAPR modeling.

Gregory Stella

Senior Scientist and Managing Partner

Alpine Geophysics, LLC

Mr. Stella is internationally recognized as a technical authority in the planning, design, development, evaluation, application, and modeling of local, national, and international emission inventories and policy options for the projection and control of ozone and particulate matter pollutants and precursors. He has coordinated with Federal, State, Regional, Local, International, Tribal, and private workgroups, modeling centers, and stakeholders to develop, evaluate, and apply alternative control measures and control program designs in support of emissions and air quality analyses.

Prior to joining Alpine in 2003, Mr. Stella was at on staff at EPA's Office of Air Quality Planning and Standards where he managed and prepared the emission inventories, control strategies, and associated temporal, spatial and speciation data for the Regional Transport NOx SIP Call, Section 126 rulemaking, Tier-2 tailpipe standards, 1-hour attainment demonstrations, Heavy-Duty Diesel Engine standards, Multi-Pollutant legislation, Clear Skies Analysis, and US/Canadian Air Quality Agreements. Mr. Stella is a recipient of two U.S. EPA Gold Medals, for the NOx SIP Call Rulemaking (1999) and the Tier-2 Tailpipe Standard (2001) as well as a U.S. Department of Justice Certificate of Commendation for working with the Environment and Natural Resources Division (2000) and multiple Bronze Medals for Commendable Service for projects in which he participated while at EPA.

Mr. Stella received his Bachelors of Science degree in Chemical Engineering from the Johns Hopkins University in Baltimore, Maryland.

FLORIDA ELECTRIC POWER COORDINATING GROUP, INC. (FCG)
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TAMPA, FLORIDA 33607-4512



September 30, 2011

Sent Via Email:
goffman.joseph@epa.gov

Mr. Joseph Goffman
United States Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave, NW
Washington, DC 20460

RE: Florida Data Errors in Cross-State Air Pollution Rule

Dear Mr. Goffman:

On behalf of the Florida Electric Power Coordinating Group ("FCG"), enclosed is a compilation of data errors that we request EPA correct in its promulgation of the final Cross-State Air Pollution Rule ("CSAPR"). Accuracy in the data that EPA used to construct CSAPR is essential, and we understand that EPA is interested in understanding the extent of any errors. As you will see, we have focused this error-submittal on EPA's statewide heat input projection, load growth, and unit-specific NO_x rates used in the 2012 remedy case.

The FCG also continues to have fundamental questions and concerns regarding Florida's inclusion in CSAPR based on EPA's modeled ozone-maintenance linkage to Harris County, Texas, as well as regarding an under-allocation of allowances and the 2012 compliance date. With respect to Florida's Houston linkages, EPA's own data and recent modeling results presented in congressional testimony demonstrate that Harris County is neither a nonattainment nor maintenance site. This information supports the conclusion that there are errors in EPA's modeling and methodology that resulted in the erroneous inclusion of Florida in CSAPR.

Regarding Florida's ozone-season heat input, EPA projects that Florida will utilize 13 percent less heat input in 2012 than was actually used in 2010 – this is approximately 108 trillion Btus. As a back-of-the-envelope calculation, increasing Florida's allowance budget by 13 percent equates to approximately 3,600 allowances. In addition to the low 2012 heat input, EPA has also utilized an unrealistically low growth-in-demand rate for Florida. On a unit level, the enclosed compilation includes the errors that we have identified thus far in EPA's NO_x emission rate assumptions.

EXHIBIT B

The FCG appreciates the opportunity to submit this information, and we look forward to EPA's prompt response. If you have any questions, please contact me at (850) 444-6311 or Robert Manning at (850) 222-7500 at your earliest convenience.

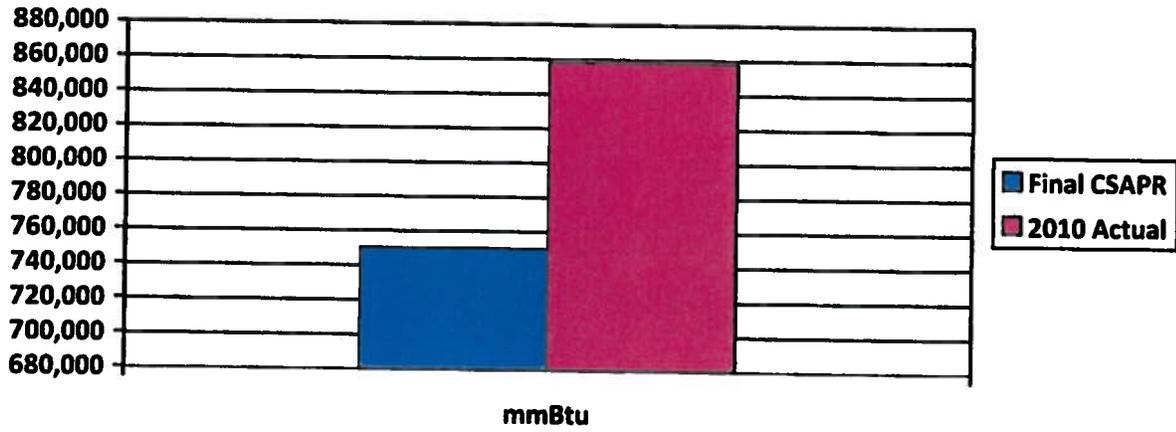
Sincerely,

A handwritten signature in blue ink that reads "Jim Vick". The signature is written in a cursive style and is positioned to the left of the typed name.

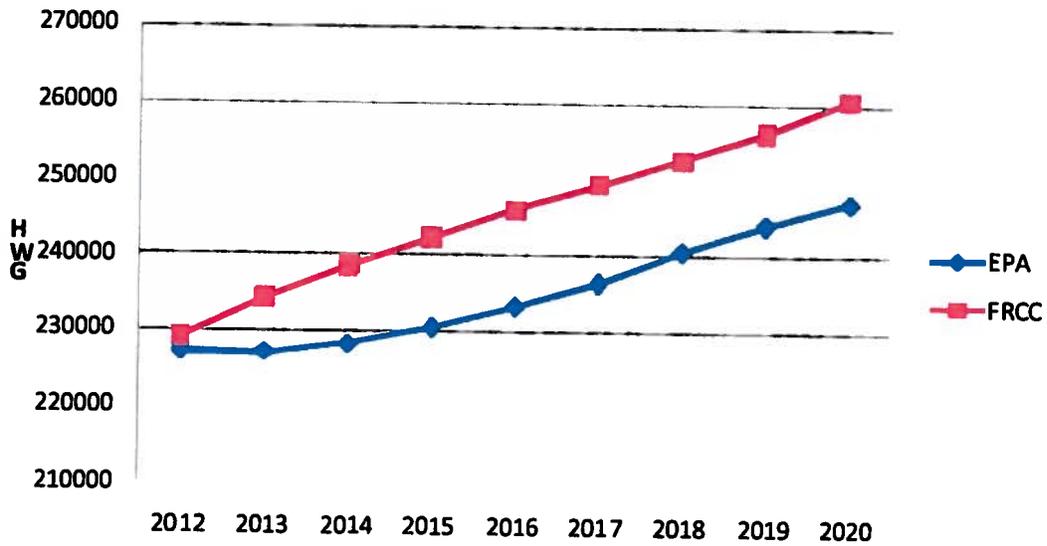
Jim Vick, Chair FCG Environmental Committee

Cc: Sam Napolitano, U.S. Environmental Protection Agency
Mike Halpin, Florida Department of Environmental Protection
FCG Environmental Committee

Florida Ozone-Season Heat Input



EPA & FRCC Load Growth Projections



Florida Data Errors

Company	Plant Name	Unique ID/Boiler ID/ORIS ID	EPA's Controlled NOx Policy Rate (lb/mmBtu)	Corrected NOx Rate (lb/MMBtu)	Notes
Gulf Power					
	Crist Electric	4	0.180	0.402	Unit has SNCR
	Crist Electric	5	0.180	0.364	Unit has SNCR
	Crist Electric	6			Gulf is replacing the SNCR on Crist Unit 6 with an SCR in 2012. EPA has the SCR listed as "dispatchable". Gulf believes this unit is non-dispatchable pursuant to state permit requirements.
	Lansing Smith	1	0.180	0.298	Unit 1 has SNCR (Unit 2 rate is correct)
	Scholz Electric	1	0.245	0.584	Unit does not have add-on controls
	Scholz Electric	2	0.334	0.584	Unit does not have add-on controls
TECO					
	Big Bend	645_B-BB01	0.05156231	0.12	Using permit limits as NOx rate.
	Big Bend	645_B-BB02	0.051572666	0.12	Using permit limits as NOx rate.
	Big Bend	645_B-BB03	0.055195193	0.12	Using permit limits as NOx rate.
	Big Bend	645_B_BB04	0.051903359	0.10	Using permit limits as NOx rate.
	Polk	7242_G_2	0	0.037	
	Polk	7242_G_3	0.003857751	0.037	
	Polk	7242_G_4	0.009487841	0.037	
	Polk	7242_G_5	0.009487841	0.037	
Lakeland					
	CD McIntosh	3	0.273 (NEEDS) .07 (calculated)	0.22	EPA's NEEDS file shows the NOx rate as .273, but the projected heat input and tonnage for the parsed files reveals a NOx rate of .07. The permit limit is .22. EPA's Base Case file does not show the SCR that was installed in 2010. The SCR is non-dispatchable pursuant to state permit requirements.

Florida Data Errors

Company	Plant Name	Unique ID/Boiler ID/ORIS ID	EPA's Controlled NOx Policy Rate (lb/mmBtu)	Corrected NOx Rate (lb/MMBtu)	Notes
Progress Energy Florida					
	Crystal River	3			EPA projects that this ~ 900 MW nuclear unit will be operating in 2012, but this unit has been in long-term outage for repairs since 2009 and will not be operating in 2012.
Florida Power & Light					
	Fort Myers	612_G_2A	0.0290	0.0297	Unit Ozone Season NOx Rate on Gas
	Fort Myers	612_G_2B	0.0290	0.0297	Unit Ozone Season NOx Rate on Gas
	Fort Myers	612_G_2C	0.0290	0.0297	Unit Ozone Season NOx Rate on Gas
	Fort Myers	612_G_2D	0.0290	0.0297	Unit Ozone Season NOx Rate on Gas
	Fort Myers	612_G_2E	0.0290	0.0297	Unit Ozone Season NOx Rate on Gas
	Fort Myers	612_G_2F	0.0290	0.0297	Unit Ozone Season NOx Rate on Gas
	Fort Myers	612_G_ST1	0.0290	0.0297	Summer Net Capability
	Fort Myers	612_G_ST2	0.0290	0.0297	Summer Net Capability
	Lauderdale	613_G_23	0.4572	0.4650	Unit Ozone Season NOx Rate on Gas
	Manatee	6042_G_3ST	0.0115	0.013	Unit Ozone Season NOx Rate on Gas
	Manatee	6042_G_A	0.0115	0.013	Unit Ozone Season NOx Rate on Gas
	Manatee	6042_G_B	0.0115	0.013	Unit Ozone Season NOx Rate on Gas
	Manatee	6042_G_C	0.0115	0.013	Unit Ozone Season NOx Rate on Gas
	Manatee	6042_G_D	0.0115	0.013	Unit Ozone Season NOx Rate on Gas

Florida Data Errors

Company	Plant Name	Unique ID/Boiler ID/ORIS ID	EPA's Controlled NOx Policy Rate (lb/mmBtu)	Corrected NOx Rate (lb/MMBtu)	Notes
Florida Power & Light Continued					
	Martin	6043_G_8A	0.0115	0.0120	Summer Net Capability, Unit Ozone Season NOx Rate on Gas
	Martin	6043_G_8B	0.0115	0.0120	Summer Net Capability, Unit Ozone Season NOx Rate on Gas
	Martin	6043_G_8C	0.0115	0.0120	Unit Ozone Season NOx Rate on Gas
	Martin	6043_G_8D	0.0115	0.0120	Unit Ozone Season NOx Rate on Gas
	Martin	6043_G_8ST	0.0115	0.0120	Summer Net Capability, Unit Ozone Season NOx Rate on Gas
	Turkey Point	621_G_5CC	0.0073	0.0100	Unit Ozone Season NOx Rate on Gas
	West County	56407_G_1CC	0.0070	0.0073	
	West County	56407_G_2CC	0.0070	0.0073	



Florida Department of
Environmental
Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

September 9, 2011

Via Electronic Mail

Ms. Beverly Banister, Director
Air, Pesticides, and Toxic Management Division
United States Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303-8960

Dear Ms. Banister,

Thank you for your visit to Tallahassee last week. The Division appreciates both your efforts to communicate the Region's priorities, and the opportunity provided to relate to you one of our key challenges. As we discussed, the Division must be accountable to the citizens and businesses of Florida by focusing our limited resources on core priorities and initiatives designed to facilitate Florida's economic recovery. It is apparent that both of us are evaluating ways to become more efficient – in reviewing and acting on permit applications, for example – and we welcome future opportunities to share ideas and successes.

During the meeting, Beverly Spagg reported that Florida recently has lagged behind the other Region 4 states in timely resolution of enforcement actions brought for high-priority violations. As we indicated, the Division is aware of the issue and is currently developing a plan that will set a goal for which we will hold ourselves accountable. The Division is committed to directing resources to resolve *all* enforcement actions in a timely matter, and is confident that we can do so while concurrently pursuing initiatives that will reduce the cost of conducting business in Florida – such as reducing our State's Title V fees.

Near the conclusion of our meeting, you asked if the Region could provide us any assistance, and we briefly discussed EPA's new Cross State Air Pollution Rule. Unfortunately, this rule has burdened the Division by requiring the diversion of our limited resources to the task of evaluating – indeed, to *understanding* – this complex rule. A particularly troubling aspect of our effort is that it has only become necessary *after promulgation of the final rule*, a time during which affected entities have merely a small window to evaluate the appropriateness of any administrative or judicial remedies.

As you are aware, Florida is not only affected by the final rule, it has been, plainly put, surprised by it. EPA cut Florida's ozone season NOx allocations by *more than 50 percent* from

EXHIBIT C

Ms. Beverly Banister
September 9, 2011
Page Two

the proposed rule. This will require more than a 25 percent reduction in emissions as compared to actual 2010 emissions. Based on the information available to us at this time regarding industry's limited compliance options, and in light of the little time left before the rule becomes effective in 2012, it appears to us that industry may not be able to meet both the rule's new environmental obligations and its existing reliability obligations. Additionally, we are concerned that Florida's final NOx budget does not consider economic recovery and growth, and does not provide a variance to account for storm consequences.

As the agency charged with protecting Florida's air quality, the Division certainly understands the purpose of the final rule, and appreciates the need to protect downwind states' air quality by curbing emissions of precursor pollutants in upwind states. As the Florida agency with the technical expertise to evaluate EPA's predictive emissions and transport analysis, the Division does not, however, yet understand, why (for example) EPA predicts a reduction in Florida's electrical power generation and why EPA predicts a significant Florida impact on Houston's air quality given Florida's tremendous decrease in ozone season NOx emissions under EPA's existing Clean Air Interstate initiative. Moreover, we do not understand why EPA has imposed its own federal implementation plan without giving Florida an adequate opportunity to develop a plan to remedy any emission activity that interferes with another state's maintenance of air quality.

We therefore greatly appreciate your offer to facilitate discussions between the Division and appropriate EPA staff. Of course, under EPA's imposed compliance deadlines, and the Clean Air Act's deadlines for seeking remedies, time is of the essence. Please let me or Brian Accardo know how the Division can best assist in coordinating the appropriate discussions.

Best regards,



Michael P. Halpin, P.E., Director
Division of Air Resource Management
Florida Department of Environmental Protection

cc: Beverly Spagg, EPA
Jeff Littlejohn, P.E., FDEP
Brian Accardo, FDEP