ORAL ARGUMENT SCHEDULED FOR APRIL 13, 2012

No. 11-1302 (and consolidated cases) – Complex

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

EME HOMER CITY GENERATION, L.P.,
Petitioner,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, ET AL.,
Respondents

On Petitions for Review of Final Action of the
United States Environmental Protection Agency

BRIEF FOR INTERVENORS AMERICAN LUNG ASSOCIATION, CLEAN AIR COUNCIL, ENVIRONMENTAL DEFENSE FUND, NATURAL RESOURCES DEFENSE COUNCIL, AND THE SIERRA CLUB AND AMICUS CURIAE AMERICAN THORACIC SOCIETY IN SUPPORT OF RESPONDENTS

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Pursuant to Circuit Rule 28(a)(1), Respondent-Intervenors American Lung Association, Clean Air Council, Environmental Defense Fund, Natural Resources Defense Council, and Sierra Club and amicus American Thoracic Society (collectively, "Public Health Intervenors") hereby certify as follows:

Parties and Amici. Except for amicus American Thoracic Society, further identified below, all parties, intervenors, and amici appearing in this Court are listed in the Opening Brief of Industry and Labor Petitioners.

Rulings Under Review. The ruling under review is a final rule issued by the U.S. Environmental Protection Agency, "Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals," 76 Fed. Reg. 48208 (Aug. 8, 2011).

Related Cases. This case consolidates with No. 11-1302 the following related petitions for review of the same final agency action: Nos. 11-1315, 11-1323, 11-1329, 11-1338, 11-1340, 11-1350, 11-1357, 11-1358, 11-1359, 11-1360, 11-1361, 11-1362, 11-1363, 11-1364, 11-1365, 11-1366, 11-1367, 11-1368, 11-1369, 11-1371, 11-1372, 11-1373, 11-1374, 11-1375, 11-1376, 11-1377, 11-1378, 11-1379, 11-1380, 11-1381, 11-1382, 11-1383, 11-1384, 11-1385, 11-1386, 11-1387, 11-1388, 11-1389, 11-1390, 11-1391,

11-1392, 11-1393, 11-1394, and 11-1395. None of the consolidated petitions has previously been before this Court or any other court.

Seven consolidated petitions for review of a related rule, "Federal Implementation Plans for Iowa, Michigan, Missouri, Oklahoma, and Wisconsin and Determination for Kansas Regarding Interstate Transport for Ozone," 76 Fed. Reg. 80760 (Dec. 27, 2011), are pending in this Court under *Public Service Co. of Oklahoma v. EPA*, No. 12-1023.

Several other petitions for review before this Court and before the U.S. Court of Appeals for the Sixth Circuit are being held in abeyance pending the Court's disposition of this case. The petitions before this Court are *Westar Energy, Inc. v. EPA*, No. 11-1333 (and consolidated case No. 12-1019), and *Georgia v. EPA*, No. 11-1427. The petition before the Sixth Circuit is *Ohio v. EPA*, No. 11-3988. Each of these petitions seeks review of a separate EPA action disapproving a proposed state implementation plan revision purporting to address some of the respective state's statutory obligations under the Clean Air Act that are at issue in this case.

CORPORATE DISCLOSURE STATEMENTS

Pursuant to Fed. R. App. P. 26.1 and Circuit Rule 26.1, Public Health Intervenors provide the following corporate disclosure statements:

Respondent-Intervenors Clean Air Council, Environmental Defense Fund, Natural Resources Defense Council, and Sierra Club state that they are nonprofit organizations focused on protection of public health and the environment.

Respondent-Intervenor American Lung Association states that it is a national not-for-profit public health organization dedicated to saving lives by improving lung health and preventing lung disease.

Amicus American Thoracic Society states that it is a national not-for-profit public health organization dedicated to preventing respiratory disease.

Public Health Intervenors have no outstanding shares or debt securities in the hands of the public, nor any parent, subsidiary or affiliate that has issued shares or debt securities to the public.

DATED: March 16, 2012

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AMICUS' STATEMENT OF IDENTITY, INTEREST IN CASE, AND SOURCE OF AUTHORITY TO FILE

Pursuant to Fed. R. App. P. 29(c)(4), amicus American Thoracic Society ("ATS") states that it is an international educational and scientific organization founded in 1905. ATS and the approximately 18,000 physicians and scientists it represents help prevent and fight respiratory disease around the globe through research, education, patient care, and advocacy.

ATS has strong interests in ensuring that regulatory requirements addressing significant contributions from upwind states to serious air pollution problems in downwind states are fully and timely enforced, and in addressing the arguments Petitioners make, which could have an adverse effect on EPA's ability to implement statutory requirements in a timely manner.

ATS's authority to join in filing this brief is based on leave of this Court. By motion filed February 14, 2012, ATS sought leave to participate in this case as an amicus and more particularly to join in the brief for public health and environmental intervenors without alteration to the word limits or due date applicable to that brief established in the Court's Order dated January 18, 2012. ATS's motion was unopposed and was granted by the Court in an Order dated February 16, 2012.

AMICUS' STATEMENT OF AUTHORSHIP AND FINANCIAL CONTRIBUTIONS

Pursuant to Fed. R. App. P. 29(c)(5), amicus American Thoracic Society states that this joint brief is being jointly submitted with Respondent-Intervenors American Lung Association, Clean Air Council, Environmental Defense Fund, Natural Resources Defense Council, and Sierra Club, whose counsel authored the brief and who funded the preparation and submission of the brief. Amicus states that no other party or person authored the brief in whole or in part or contributed money intended to fund its preparation or submission.

DATED: March 16, 2012

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* Authorities upon which we chiefly rely are marked with asterisks.

GLOSSARY

Act	Clean Air Act
CAIR	Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to the NOx SIP Call, 70 Fed. Reg. 25162 (May 12, 2005)
$/ton	Dollars per ton of pollutant emitted or removed
EPA Br.	Brief for Respondent
Industry Br.	Opening brief for Industry and Labor Petitioners
$\mu g/m^3$	Micrograms per cubic meter
NAAQS	National Ambient Air Quality Standard
NOx	Nitrogen oxides
$PM_{2.5}$	Fine particulate matter
ppb	Parts per billion
ppm	Parts per million
SO_2	Sulfur dioxide
State Br.	Opening brief for State and Local Petitioners
Transport Rule	Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 Fed. Reg. 48208 (Aug. 8, 2011)

JURISDICTIONAL STATEMENT

This Court's jurisdiction rests upon 42 U.S.C. 7607(b)(1).

STATUTES AND REGULATIONS

Applicable statutes and regulations are set forth in Petitioners' briefs.

INTRODUCTION

Respondent-Intervenors American Lung Association ("ALA"), Clean Air Council ("CAC"), Environmental Defense Fund ("EDF"), Natural Resources Defense Council ("NRDC"), and Sierra Club and amicus American Thoracic Society ("ATS") are nonprofit organizations dedicated to protecting public health and the environment.[1]

Air quality that fails to comply with the Clean Air Act's National Ambient Air Quality Standards ("NAAQS") kills and sickens thousands of Americans every year and causes a variety of serious harms to public welfare. Pollution from upwind states often makes it difficult (and in some cases, impossible) for downwind states to attain and maintain the NAAQS for fine particulate matter ("$PM_{2.5}$") and ozone through local pollution controls alone, as upwind states often lack incentives to control emissions that produce adverse effects primarily felt elsewhere. While interstate

[1] The organizations' motions to intervene and participate detail their interests and involvement in the rulemaking. *See* Docs. 1328729 (CAC, EDF, Sierra Club), 1331171 (ALA), 1331218 (NRDC), 1358426 (ATS).

pollution has long been recognized as a serious national problem, determining the relative contributions of multiple pollution sources (and the affected state itself) and defining appropriate remedies has proven technically complex and contentious.

The Cross-State Air Pollution Rule, 76 Fed. Reg. 48208 (Aug. 8, 2011) ("Transport Rule" or "Rule"), is EPA's response to *North Carolina v. EPA*, 531 F.3d 896, *modified on reh'g*, 550 F.3d 1176 (D.C. Cir. 2008), which held unlawful EPA's predecessor interstate transport regulation, the Clean Air Interstate Rule ("CAIR"), 70 Fed. Reg. 25162 (May 12, 2005), primarily due to CAIR's failure to provide downwind states sufficiently certain and expeditious protection pursuant to the Clean Air Act's "good neighbor" provision, 42 U.S.C. 7410(a)(2)(D)(i)(I).

BACKGROUND

EPA (Br. 5-11) sets out the statutory and regulatory background. We add the following brief discussion:

A. Interstate Transport, Nonattainment, and Public Health.

Elevated levels of $PM_{2.5}$ and ozone represent major public health problems. $PM_{2.5}$ is a complex mix of chemicals (including precursors sulfur dioxide ("SO_2") and nitrogen oxides ("NOx")), hydrocarbons, and other substances associated with a wide range of serious human health effects,

including premature death, aggravation of respiratory and cardiovascular disease, lung cancer and other lung disease, decreased lung function, asthma attacks and non-fatal heart attacks.[2] Ozone, formed when NOx and volatile organic compounds are exposed to heat and sunlight, is a respiratory irritant that also poses serious health threats, including premature death, reduced lung function, respiratory inflammation and asthma.[3] Ozone and $PM_{2.5}$ are particularly harmful to children, whose still-developing lungs are more vulnerable to air pollution than are adults' lungs, and who experience increased exposure because they breathe faster, are more physically active, and spend more time outdoors.[4]

In 2005, $PM_{2.5}$ exposure was responsible for between 130,000 and 340,000 premature deaths from poor air quality, and ozone exposure for an additional 4700 premature deaths – more U.S. deaths than occurred that year

[2] *See, e.g.*, 75 Fed. Reg. at 45219; Testimony of Anne Mellinger-Birdsong, MD, MPH, FAAP, EPA-HQ-OAR-2009-0491-0516 (JA00553-54); Neal Fann et al., *Estimating the National Public Health Burden Associated with Exposure to Ambient $PM_{2.5}$ and Ozone*, 32 Risk Analysis 81 (2012), EPA-HQ-OAR-2009-0491-4444, *available at* http://onlinelibrary.wiley.com/doi/10.1111/j.1539-6924.2011.01630.x/pdf.

[3] *See, e.g.*, 75 Fed. Reg. at 45220; Fann, *supra* note 2.

[4] *See* Mellinger-Birdsong, *supra*, note 2.

from all accidents (120,000).[5] In addition, $PM_{2.5}$ and ozone pollution are responsible for a variety of non-fatal but serious and costly health impacts, including millions of cases of respiratory symptoms, asthma exacerbation, lost work and school days, and over 100 million restricted-activity days for children.[6]

High mortality and morbidity from $PM_{2.5}$ and ozone continue more than 40 years after passage of the 1970 Act in large part because these pollutants (and their primary precursors, SO_2 and NOx) can be blown by prevailing winds hundreds of miles, across state lines, thus impairing air quality in downwind states that have no regulatory jurisdiction over the originating emission sources. *See, e.g.*, 75 Fed. Reg. at 45226-27, 45230, 45236. *See also Michigan v. EPA*, 213 F.3d 663, 674 (D.C. Cir. 2000); William H. Rodgers, Jr., *Environmental Law* § 3.16 (2009) ("one of the more intractable problems of air quality"). Degraded air quality resulting from pollution transport has been a major factor in chronic nonattainment problems in many areas of the country.[7]

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[5] 76 Fed. Reg. at 48309 (citing Fann, *supra* note 2).

[6] Fann, *supra* note 2, at 88. $PM_{2.5}$ and ozone, among other harms, reduce visibility in parks and wilderness areas, impair ecosystems, and damage crops and forests. *See, e.g.*, 75 Fed. Reg. at 45219-20.

[7] For example, several of the downwind locations the Transport Rule is designed to benefit were first designated nonattainment for ozone in 1978,

In 1970, 1977, and 1990, Congress enacted progressively more exigent provisions requiring that State Implementation Plans ("SIPs") address transport. *See* EPA Br. 6-7 & n.5. The current provision requires each SIP to contain adequate provisions "prohibiting, consistent with the provisions of this subchapter, any source or other type of emissions activity within the State . . . which will . . . contribute significantly to nonattainment in, or interfere with maintenance by, any other State." 42 U.S.C. 7410(a)(2)(D)(i)(I).

B. The Rule's Attainment and Health Benefits.

The Transport Rule implements Section 7410(a)(2)(D)(i)(I) and the *North Carolina* decision by requiring upwind states to eliminate, in a timely way, significant contributions to NAAQS attainment and maintenance problems affecting much of the United States population, including the residents of metropolitan areas such as New York, Chicago, Baltimore, Detroit, Houston, Atlanta, Cleveland, St. Louis, Pittsburgh, Cincinnati, Milwaukee, Indianapolis, Dayton, Birmingham, Harrisburg, and Baton

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when EPA first began making such designations, 43 Fed. Reg. 8962 (Mar. 3, 1978), and have continued to suffer some form of ozone nonattainment continuously ever since. *See* EPA, Green Book, Part 6 - Historical Whole or Part County Nonattainment Status by Year Since 1978, *available at* http://www.epa.gov/oaqps001/greenbk/multipol.html (last visited March 4, 2012). These areas include the New York, Baltimore, Houston, and Baton Rouge metropolitan areas. *Id.*; *see also* 76 Fed. Reg. at 48246.

Rouge.[8] EPA projects that the Rule will substantially assist numerous downwind states in meeting, in accordance with applicable deadlines, their $PM_{2.5}$ and ozone attainment and maintenance obligations. 76 Fed. Reg. at 48307-08. For example, the Rule will allow all downwind states in the Transport Rule region to attain the annual $PM_{2.5}$ NAAQS, and will reduce the number of sites with 24-hour $PM_{2.5}$ attainment or maintenance problems from 41 to 5. *Id.*

The Rule will save tens of thousands of lives per year, avoid hundreds of thousands of serious illnesses, and improve air quality for 240 million Americans. *Id.* at 48309, 48313-14. EPA determined that the $PM_{2.5}$ improvements under the Transport Rule will, starting in 2014,

> annually reduce between 13,000 and 34,000 $PM_{2.5}$-related premature deaths, 15,000 non-fatal heart attacks, 8,700 incidences of chronic bronchitis, 8,500 hospital admissions, and 400,000 cases of aggravated asthma while also reducing 10 million days of restricted activity due to respiratory illness and approximately 1.7 million work-loss days. We also estimate substantial health improvements for children from fewer cases of upper and lower respiratory illness and acute bronchitis.

Id. at 48309.

Some of the benefits of the Rule, such as avoided premature deaths, health care costs and productivity losses, may be monetized using accepted

[8] EPA has projected ozone or $PM_{2.5}$ nonattainment or maintenance problems at monitors in each of these metropolitan areas. 76 Fed. Reg. at 48241-46.

methodology. EPA calculated that "the annual net benefit (social benefits minus social costs)" in 2014 would be $110 to $280 billion. *Id.* at 48313-14. The Rule will also provide a wide variety of significant health and welfare benefits for which the agency did not assign a monetary value, including environmental benefits such as reduced acid deposition and eutrophication of estuaries. *See id*. at 48315-17.

STANDARD OF REVIEW

The Rule must be upheld unless it is shown to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 42 U.S.C. 7607(d)(9); *see* EPA Br. 11-12.

SUMMARY OF ARGUMENT

The Transport Rule is a lawful and reasonable response to *North Carolina*, in which this Court directed EPA to correct fatal flaws in the pace and scope of protections for downwind areas. By requiring long-overdue reductions in interstate air pollution, the Rule will allow numerous populous areas of the country to attain and maintain NAAQS, providing massive benefits for public health and large net benefits to the national economy. EPA's brief ably explains why Petitioners' myriad challenges to the Rule lack merit. In this brief, we address Petitioners' broad challenges to the

Rule's budget-setting methodology, and point out two overarching flaws in Petitioners' attacks on the Rule.

Contrary to Industry Petitioners' claims, EPA set the Rule's budgets based upon a reasonable interpretation of Section 110(a)(2)(D)(i)(I) and at levels that were fully justified (and indeed conservative) given the record before the agency.

Petitioners' attacks simply ignore affected downwind states' need to attain NAAQS "as expeditiously as practicable" and by imminent statutory deadlines, considerations central to the *North Carolina* decision.

Finally, in protecting downwind states and their ability to comply with the Act, the Rule is fully consistent with the Clean Air Act's cooperative federalism scheme.

ARGUMENT

I. THE TRANSPORT RULE BUDGETS ARE LAWFUL AND REASONABLE.

A. EPA's Emission Budget-Setting Methodology Adequately Accounts for the Resulting Improvements in Downwind Air Quality Status and Is Reasonable.

Industry Petitioners (Br. 29) characterize EPA's budget-setting methodology as premised solely on cost-effectiveness, and assert that it lacks a limiting principle sufficiently related to downwind nonattainment or

maintenance status. This characterization is simply wrong. Petitioners ignore the multiple ways in which EPA's methodology used projected downwind air quality status in determining the stringency of the Rule's emission budgets.

In the Transport Rule (as in prior interstate transport rules) EPA employed a multi-step process integrating inputs and output from separate models focused on air pollution flows, power sector operations, and emissions from other source categories. *See generally* 76 Fed. Reg. at 48224-65. EPA did account for the air quality status at downwind monitors, but, rather than focusing exclusively on that single factor, EPA considered it in combination with other relevant factors, most notably the cost-effectiveness of emission reductions. *Id.*; *see also Michigan*, 213 F.3d at 677 (noting that "[t]he term 'significant'" would be "a very odd choice to express unidimensionality"); EPA Br. 21-22 & n.11.

EPA factored in projected downwind air quality at multiple stages of this integrated process. Air quality projections for the base case were considered twice: first, to distinguish monitors with attainment or maintenance problems from monitors without problems, and then, in conjunction with source-apportionment modeling, to identify upwind states whose emissions reached the relevant downwind monitors in sufficient

quantities to cause the states to be "linked" to those monitors and therefore potentially subject to emission reduction requirements. *See* 76 Fed. Reg. at 48211.

At the next stages, EPA considered changes in projected attainment or maintenance status to evaluate potential cost thresholds for use in setting emission budgets and to select the cost thresholds that were ultimately applied. *Id.* at 48248. Also, for purposes of the $PM_{2.5}$ program, the projected air quality status of linked downwind monitors following emission reductions achievable at a $500/ton cost threshold was used to determine whether each upwind state would be assigned to SO_2 Group 1 or Group 2. *Id*. at 48257.[9] Finally, for purposes of the ozone program, EPA considered the projected air quality status of each upwind state's linked downwind monitors following implementation of the Rule in order to determine whether implementation would constitute full or only partial compliance

[9] *See* 76 Fed. Reg. at 48257 (discussing SO_2 Groups); EPA Br. 18. Industry Petitioners object to a purported *failure* by EPA to use downwind air quality status as a limiting principle in setting state emission budgets, Industry Br. 29, while simultaneously objecting to EPA's use of downwind air quality status in assigning states between SO_2 Groups 1 and 2, Industry Br. 32-33, even though the group assignments were carried out for the specific purpose of setting the emission budgets for the respective states.

with section 110(a)(2)(D)(i)(I) for that upwind state. *See* 76 Fed. Reg. at 48247. [10]

In summary, Petitioners' contention that EPA's methodology failed to appropriately incorporate stringency limits based on downwind air quality status achieved is without merit. Particularly given the broad statutory phrasing, *see Michigan*, 213 F.3d at 677, and the "technical, complex, and dynamic" subject-matter, *see Nat'l Cable & Telecomms. Ass'n v. Gulf Power Co.*, 534 U.S. 327, 339 (2002) (citing *Chevron U.S.A. Inc. v. NRDC*, 467 U.S. 837, 842-43 (1984)), EPA's interpretation and approach are clearly permissible.

B. EPA's Modeling of Post-Implementation Air Quality Confirms That the Rule's Emission Budgets Are Reasonable.

Petitioners assert that EPA's modeling of 2014 post-implementation air quality shows that the Rule's emission budgets are more stringent than necessary to eliminate upwind states' significant contribution. Industry Br. 28-29. However, in doing so, they improperly cite data for "averages" and

[10] The states for which Transport Rule implementation would constitute only partial compliance remain potentially subject to a future rule with respect to the 1997 ozone NAAQS. 76 Fed. Reg. at 48247. In addition, all states remain subject to likely further NOx reduction requirements with respect to the more stringent 2008 ozone NAAQS, which is not addressed by the Transport Rule.

"majorities" of all linked downwind monitors rather than data for the worst-affected monitors. *Id.*; *see also* Significant Contribution TSD at 35-36 (JA02964-65).[11] The data Petitioners cite are simply irrelevant to an assessment of whether the budgets are overly stringent. Properly interpreted, EPA's modeling of post-implementation air quality indicates that EPA set the budgets at levels *less* stringent than could have been justified.

The moderation of the emission budgets overall is evident from the fact that EPA's projections of post-implementation air quality show multiple monitors with continued nonattainment or maintenance problems. 76 Fed. Reg. at 48247. Because most upwind states are linked to multiple downwind areas, emission reductions needed in particular sets of upwind states in order to eliminate "significant" contribution to a given downwind area will necessarily also improve air quality in other downwind areas linked to the same upwind states; this collateral benefit comes without regard to whether the same degree of upwind emission reductions is also "needed" in those additional downwind areas. *See* EPA Br. 37-39 & nn. 23, 25. The

[11] Petitioners further mislead by citing figures based on "average" design values, ignoring the *North Carolina* court's admonition to give independent meaning to "interfere with maintenance," 531 F.3d at 908-11, which EPA has done by basing its analysis in part on the higher "maximum" design values.

appropriate criterion for evaluating the degree to which air quality problems relevant to the Rule have been resolved is air quality at the *most-affected* linked downwind locations, not the "average" air quality across all linked downwind locations. *See* 42 U.S.C. 7410(a)(2)(D)(i)(I) (prohibiting upwind emissions causing air quality problems in "*any* other State") (emphasis added); *see also New York v. EPA*, 443 F.3d 880, 885-86 (D.C. Cir. 2006) (emphasizing breadth of "any" in Clean Air Act context).

The 2014 post-implementation air quality modeling results also demonstrate that the individual state emission budgets are not excessively stringent, but rather are entirely reasonable. These budgets do not attempt to resolve all downwind air problems. In the case of ozone, eleven of the states included in that program are linked to at least one ozone monitor projected to have continuing air quality problems following implementation of the Rule. 76 Fed. Reg. at 48247.[12] All the remaining states are linked to monitors with projected maximum ozone design values between 83.1 and 83.6 ppb (or 0.0831 and 0.0836 ppm),[13] levels of air quality that with rounding would meet – but certainly not "overcomply" with – the 1997 8-

[12] This group includes Missouri, one of the states added to the Rule's ozone program by the supplemental rule, 76 Fed. Reg. 80760 (Dec. 27, 2011).

[13] *See* 76 Fed. Reg. at 48246 (ozone linkages); Air Quality TSD at B-4 to B-34 (ozone remedy maximum design values) (JA02549-79).

hour ozone NAAQS of 0.08 ppm. Further, *none* of the downwind ozone monitors linked to *any* of the upwind states in the ozone program is projected to have air quality attaining the 2008 8-hour ozone NAAQS of 0.075 ppm.[14]

Thus, while EPA has based the Rule's budgets on the 1997 ozone NAAQS and has determined that implementation of the Rule will satisfy certain of the states' section 110(a)(2)(D)(i)(I) compliance obligations, 76 Fed. Reg. at 48247, there is strong evidence that all of these states are already subject to additional section 110(a)(2)(D)(i)(I) compliance obligations with respect to the 2008 ozone NAAQS and that those additional obligations exceed any emission reductions the states are required to make under the Rule's ozone budgets.

In the case of the Rule's $PM_{2.5}$ program, 15 of the 16 SO_2 Group 1 states are linked to at least one $PM_{2.5}$ monitor projected to have continuing air quality problems in 2014 following implementation of the Rule.[15] Most of these Group 1 states are linked to multiple such monitors in multiple

[14] *See* 73 Fed. Reg. 16436 (Mar. 27, 2008) (2008 ozone NAAQS); 77 Fed. Reg. 8197 (Feb. 14, 2012) (2008 ozone NAAQS proposed implementation schedule); sources *supra* note 13.

[15] *See* 76 Fed. Reg. at 48213 tbl.III-1 (identifying states in Groups 1 and 2); *id.* at 48242-44 (24-hour $PM_{2.5}$ linkages); Air Quality TSD at B-64 to B-92 (24-hour $PM_{2.5}$ remedy maximum design values) (JA02609-37).

downwind states.[16] The final Group 1 state (Tennessee) is linked to monitors in two different states with projected 24-hour $PM_{2.5}$ maximum design values of 34.5 $\mu g/m^3$,[17] within rounding distance of the NAAQS of 35 $\mu g/m^3$. There is no indication from EPA's post-implementation air quality projections that the emission budgets for the states in SO_2 Group 1 are excessively stringent.

By definition, *see* 76 Fed. Reg. at 48252, the states in SO_2 Group 2 are not linked to downwind $PM_{2.5}$ monitors projected to have continuing air quality problems following implementation of the Rule. EPA's modeling of post-implementation air quality confirms this intended characteristic,[18] although projected air quality at some of the relevant monitors is only slightly better than the levels at which EPA projects potential NAAQS maintenance difficulties, including a Birmingham-area monitor with an annual $PM_{2.5}$ maximum design value of 14.21 $\mu g/m^3$ (compared to the NAAQS of 15 $\mu g/m^3$), Air Quality TSD at B-35 (JA02580), and a Chicago-area monitor with a 24-hour $PM_{2.5}$ maximum design value of 34.3 $\mu g/m^3$

[16] *See* sources *supra* note 15.

[17] *See* sources *supra* note 15.

[18] *See* sources *supra* note 15; *see also* 76 Fed. Reg. at 48242-44 (annual $PM_{2.5}$ linkages); Air Quality TSD at B-35 to B-63 (annual $PM_{2.5}$ remedy maximum design values) (JA02580-608).

(compared to the NAAQS of 35 $\mu g/m^3$), Air Quality TSD at B-69 (JA02614). The SO_2 emission budgets for the Group 2 states represent emissions remaining after reductions that are economic at a cost-effectiveness threshold of $500/ton. EPA chose this threshold because "$500 per ton is a reasonably representative cost threshold to incentivize operation of existing control equipment, and higher cost thresholds may induce new advanced control retrofits that require a longer lead time for installation." Significant Contribution TSD at 6 (JA02935).

The conservatism of EPA's choice is indicated by its modeling of alternative cost-effectiveness thresholds at the proposal stage, which showed continued reduction in the number of monitors with air quality issues for annual $PM_{2.5}$ through the slightly higher $600/ton threshold.[19] 75 Fed. Reg. at 45280 tbl.IV.D-3. Additionally, EPA has correctly noted that *Michigan* allows it to set cost thresholds for groups of states where appropriate, rather than setting individual thresholds for each state, 76 Fed. Reg. at 48257 (citing *Michigan*, 213 F.3d at 679-80). Finally, EPA has stated that its analysis showed that the Group 2 states required similar cost thresholds in order to resolve all air quality problems at linked downwind monitors, *id.*, a

[19] The $500/ton threshold is also much lower than thresholds used in prior Section 110(a)(2)(D)(i)(I) rulemakings. *See, e.g.*, 63 Fed. Reg. 57356 (Oct. 27, 1998) (using $2000/ton threshold for NOx reductions from all covered states).

statement consistent with the post-implementation modeling results for the Birmingham and Chicago monitors noted above.

In short, the record demonstrates that EPA has not set the SO_2 Group 2 emission budgets at excessively stringent levels.

II. PETITIONERS IGNORE THE STATUTORY IMPERATIVE OF ACHIEVING *TIMELY* REDUCTIONS IN EMISSIONS THAT CONTRIBUTE TO DOWNWIND NONATTAINMENT PROBLEMS.

A common theme in Petitioners' arguments is that EPA asked too much, too quickly, of upwind states and sources, and that the elaborate analyses EPA performed were not elaborate enough. As EPA's brief demonstrates, each of these arguments lacks merit. But all of Petitioners' arguments are further weakened by their failure even to *acknowledge* the interest in timely reductions that is expressed in the statute and that was highlighted in *North Carolina*.

The very core of the Act, the NAAQS are designed to ensure that pollution concentrations fall within bounds that protect public health. *See Whitman v. Am. Trucking Ass'ns*, 531 U.S. 457, 464-65 (2001). The Act places a premium on timely attainment of those standards: Section 110(a)(1) requires states to submit conforming SIP revisions within three years after promulgation of a new or revised NAAQS, 42 U.S.C. 7410(a)(1), and Section 172(a)(2)(A) provides that an area designated as nonattainment

must, absent an extension from EPA, attain NAAQS "as expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment," 42 U.S.C. 7502(a)(2)(A); *see also id.* 7511(a)(1).

In *North Carolina*, this Court held that one of CAIR's primary flaws was EPA's failure to coordinate that rule's timing of upwind emission reduction requirements with the NAAQS compliance deadlines faced by the affected downwind states. 531 F.3d at 911-12. As this Court explained, this violated the "consistent with the provisions of this subchapter" language, which incorporates the compliance deadlines of downwind states and their "expeditiously as practicable" obligation. *Id*. at 912; *see also id*. at 930 (EPA "must decide what date, whether 2015 or earlier, is as expeditious as practicable for states to eliminate their significant contributions to downwind nonattainment").

"[C]onsistent with the charge given * * * in *North Carolina*," EPA aligned the Transport Rule compliance dates with attainment deadlines for the relevant NAAQS. 76 Fed. Reg. at 48277. For the 1997 ozone NAAQS, EPA required compliance in 2012, and for the 1997 and 2006 $PM_{2.5}$ NAAQS, EPA established a two-stage compliance schedule with a first round of NOx and SO_2 reductions required in 2012, and a second, deeper round of SO_2 reductions required in 2014 for some states.

> In selecting these dates, EPA was mindful of the NAAQS attainment deadlines which require reductions as expeditiously as practicable and no later than specified dates (see 42 U.S.C. 7502(a)(2)(A) (general attainment dates); 42 U.S.C. 7511(a)(1) (attainment dates for ozone nonattainment areas)), and also mindful of the court's instruction to "decide what date, whether 2015 or earlier, is as expeditious as practicable for states to eliminate their significant contributions to downwind nonattainment." *North Carolina*, 531 F.3d at 930.

76 Fed. Reg. at 48277. EPA explained in detail how the schedule for implementing the Rule was necessary in light of imminent attainment deadlines for each of the three NAAQS, including deadlines falling in 2012, 2013, 2014, and 2015. *See id*. at 48277-78.

Petitioners' attacks on the Rule consistently disregard the urgent interest in achieving *timely* reductions in upwind states' contribution to downwind states' nonattainment problems. For example, State Petitioners assert that upwind States "should have no obligation," State Br. 22, to address interstate pollution until EPA finalizes regulations under Section 110(a)(2)(D), and that, notwithstanding the "shall" in 42 U.S.C. 7410(c)(1), EPA may only proceed by means of a SIP call, State Br. 22, with the implied result that upwind states would not be required to reduce their emissions for *at least* another two years.[20] Given their position here, Industry Petitioners

[20] *See* 42 U.S.C. 7410(k)(5) (providing states up to 18 months to respond to a SIP call); *id.* 7410(f) (requiring public notice and comment for SIP

would likely insist that, even then, any rule requiring material SO_2 reductions must provide a further three to five years for installation of scrubbers. *See* Industry Br. 52 n.44. In short, Petitioners would have EPA ignore the attainment deadlines and the "as expeditiously as practicable" requirement that this Court emphasized in *North Carolina*.

Petitioners also seek to turn this Court's timeliness-focused *North Carolina* decision *itself* into a basis for delays in achieving emissions reductions. State Petitioners complain that they are being "penalized for EPA's mistakes" (Br. 28) in CAIR – even though *North Carolina* ruled that CAIR failed to protect *downwind states* as provided in the Act. And State Petitioners (Br. 25-26) would deprive *North Carolina* of the force normally given court decisions; they contest EPA's conclusion that prior SIP approvals based on CAIR were erroneous and thus no bar to EPA's promulgation of remedial Federal Implementation Plans ("FIPs"). But EPA was correct. *See Rivers v. Roadway Express, Inc.*, 511 U.S. 298, 312-13 (1994) ("A judicial construction of a statute is an authoritative statement of what the statute meant before as well as after the decision of the case giving rise to that construction.").

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revisions); *id.* 7410(k)(1)-(2) (providing EPA up to 14 months to act on a proposed SIP revision).

III. PETITIONERS' INVOCATIONS OF FEDERALISM ARE MISPLACED.

Petitioners repeatedly invoke federalism-based background principles, asserting that the Transport Rule "radically alters the CAA's federal-State balance of power." State Br. 27; *see id*. at 4-5, 28; Industry Br. 5.

That "[e]ach State shall have the primary responsibility for assuring air quality *within* * * * such State," 42 U.S.C. 7407(a) (emphasis added), is an important principle under the Act, but that "responsibility" does not include a right to pollute neighboring states or unfettered discretion about when to reduce interstate pollution. *See, e.g.*, 42 U.S.C. 7410(a)(2)(D), 7426(b)-(c), 7470(1). Long before provisions like Section 110(a)(2)(D)(i)(I) became law, it was recognized that the "sovereign" interests of downwind states obligate the national government to protect their "fair and reasonable demand" "not to be polluted on a grand scale." *See Georgia v. Tenn. Copper Co.*, 206 U.S. 230, 237 (1907).[21]

State Petitioners insist (Br. 20-28) that EPA has violated a federalism–driven requirement to always prefer a SIP Call over a FIP. But as EPA

[21] *See also Missouri v. Illinois*, 180 U.S. 208, 241 (1901) (interstate pollution is a federal issue because "[d]iplomatic powers and the right to make war having been surrendered [by the states] to the general government, it was to be expected that upon the latter would be devolved the duty of providing a remedy . . . ."); *Massachusetts v. EPA*, 549 U.S. 497, 519-20 (2007).

explains (Br. 44-52), Section 110(c)(1), 42 U.S.C. 7410(c)(1) provides that EPA "shall" impose a FIP "at any time within two years" when, as here, either of the specified conditions is met. Section 110(c)(1) is part of a statutory scheme that reflects a careful balance between states' responsibility for air quality management decisions within their borders and EPA's responsibility to see that health-based national standards are satisfied within the timeframe designated by Congress. It may not be ignored based upon general principles of state responsibility. *Cf. Appalachian Power Co. v. EPA*, 249 F.3d 1032, 1046 (D.C. Cir. 2001).[22] The rendition of federalism spun out in Petitioners' briefs, heavy on asserted immunities and light on mutual obligations, is not *the Act*'s cooperative federalism. EPA properly acted to protect the statutory rights of downwind states in accordance with this Court's instructions.

CONCLUSION

The petitions for review should be denied.

[22] States are free to obtain approval of a SIP for 2013 allowance allocations and to replace the FIP entirely for 2014 and beyond. *See* 76 Fed. Reg. at 48212 n.8, 48327; *see also* EPA Br. 48 (noting that states were free to amend SIPs to reduce interstate pollution before Transport Rule was promulgated).

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

I certify pursuant to Fed. R. App. P. 32(a)(7)(C) that, according to the word-count program in Microsoft Word 2007, the portions of the foregoing brief that count against the word limit total 4636 words, and that, together with the briefs filed or to be filed by the State and Municipal respondent-intervenors and the Industry respondent-intervenors, the respondent-intervenors' briefs together will not exceed the "combined total of 14,000 words" specified in the Court's briefing format order of January 18, 2012.

CERTIFICATE OF SERVICE

I hereby certify that I filed the foregoing brief electronically via this Court's CM/ECF system, which will automatically serve copies upon registered counsel.

March 16, 2012

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