The EPA Administrator, Gina McCarthy, signed the following notice on 11/16/2015, and EPA is submitting it for publication in the *Federal Register* (FR). While we have taken steps to ensure the accuracy of this Internet version of the rule, it is not the official version of the rule. Please refer to the official version in a forthcoming FR publication, which will appear on the Government Printing Office's FDSys website (http://gpo.gov/fdsys/search/home.action) and on Regulations.gov (http://www.regulations.gov) in Docket No. EPA-HQ-OAR-2015-0500. Once the official version of this document is published in the FR, this version will be removed from the Internet and replaced with a link to the official version.

6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52, 78, and 97

[EPA-HQ-OAR-2015-0500; FRL-9935-25-OAR]

RIN 2060-AS05

Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The primary purpose of this proposal is to address interstate air quality impacts with respect to the 2008 ozone National Ambient Air Quality Standards (NAAQS). The EPA promulgated the Cross-State Air Pollution Rule (CSAPR) on July 6, 2011, to address interstate transport of ozone pollution under the 1997 ozone NAAQS and fine particulate matter ($PM_{2.5}$) under the 1997 and 2006 $PM_{2.5}$ NAAQS. The EPA is proposing to update CSAPR to address interstate emission transport with respect to the 2008 ozone NAAQS. This proposal also responds to the July 28, 2015 remand by the Court of Appeals for the District of Columbia Circuit of certain states' ozone-season nitrogen oxides (NO_X) emissions budgets established by CSAPR.

This proposal also updates the status of certain states' outstanding interstate ozone transport obligations with respect to the 1997 ozone NAAQS, for which CSAPR provided a partial remedy. The EPA is taking this action under Clean Air Act section 110(a)(2)(D)(i)(I), sometimes called the "good neighbor provision."

This proposal finds that ozone season emissions of NO_X in 23 eastern states affect the ability of downwind states to attain and maintain the 2008 ozone NAAQS. These emissions can be transported downwind as NO_X or, after transformation in the atmosphere, as ozone. For these 23 eastern states, the EPA proposes to issue Federal Implementation Plans (FIPs) that generally update the existing CSAPR NO_X ozone-season emissions budgets for electricity generating units (EGUs) and implement these budgets via the CSAPR NO_X ozone-season allowance trading program. One state, Kansas, would have a new CSAPR ozone season requirement under this proposal. The remaining 22 states were included in the original CSAPR ozone-season program as to the 1997 ozone NAAQS. The EPA would finalize a FIP for any state that does not have an approved SIP addressing its contribution by the date this rule is finalized. The EPA is proposing implementation starting with the 2017 ozone season. The proposed NO_X emission reductions do not necessarily eliminate fully

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states' significant contribution to downwind air quality problems. However, the proposed emission reductions would provide a partial remedy to address these obligations and would result in important near-term reductions in ozone pollution that crosses state lines, thereby improving air quality impacts in downwind states. In conjunction with other federal and state actions, these requirements would assist downwind states in the eastern United States in attaining and maintaining the 2008 ozone standard.

DATES: Comments must be received on or before [insert date 45 days after publication in the Federal Register]. Under the Paperwork Reduction Act (PRA), comments on the information collection provisions are best assured of consideration if the Office of Management and Budget (OMB) receives a copy of your comments on or before *[insert date 30 days after date of publication in the Federal Register]*.

Public hearing. The EPA will be holding one public hearing on the proposed Cross-State Air Pollution Rule Update for the 2008 Ozone National Ambient Air Quality Standards. The hearing will be held to accept oral comments on the proposal. The hearing will be held on December 17, 2015 in Washington D.C. The hearing will begin at 9:00 a.m. EST and will conclude at 8:00 p.m. EST. Additional information for this public hearing is available in a

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separate Federal Register notice and at http://www2.epa.gov/airmarkets/proposed-cross-state-air-pollution-update-rule.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2015-0500, to the *Federal eRulemaking Portal:* http://www.regulations.gov. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or withdrawn. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Mr. David Risley, Clean Air Markets Division, Office of Atmospheric Programs (Mail Code

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6204M), Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington, DC 20460; telephone number: (202) 343-9177; email address: Risley.David@epa.gov.

SUPPLEMENTARY INFORMATION:

Preamble Glossary of Terms and Abbreviations

The following are abbreviations of terms used in the preamble.

CAA or Act	Clean Air Act
CAIR	Clean Air Interstate Rule
CAMx	Comprehensive Air Quality Model with Extensions
CBI	Confidential Business Information
CEMS	Continuous Emission Monitoring Systems
CFR	Code of Federal Regulations
CSAPR	Cross-State Air Pollution Rule
EGU	Electric Generating Unit
EPA	U.S. Environmental Protection Agency
FIP	Federal Implementation Plan
FR	Federal Register
GWh	Gigawatt hours
ICR	Information Collection Request
IPM	Integrated Planning Model
Km	Kilometer
lb/mmBtu	Pounds per Million British Thermal Unit

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LNB	Low-NO_x Burners
mmBtu	Pounds per Million British Thermal Unit
MOVES	Motor Vehicle Emission Simulator
NAAQS	National Ambient Air Quality Standard
NBP	NO_X Budget Trading Program
NEI	National Emission Inventory
NO_X	Nitrogen Oxides
NODA	Notice of Data Availability
NSPS	New Source Performance Standard
OFA	Overfire Air
$PM_{2.5}$	Fine Particulate Matter
PPB	Parts Per Billion
RIA	Regulatory Impact Analysis
SC-CO_2	Social Cost of Carbon
SCR	Selective Catalytic Reduction
SIP	State Implementation Plan
SMOKE	Sparse Matrix Operator Kernel Emissions
SNCR	Selective Non-catalytic Reduction
SO_2	Sulfur Dioxide
TSD	Technical Support Document

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I. Executive Summary

The EPA promulgated the original Cross-State Air Pollution Rule (CSAPR) on July 6, 2011, to address interstate ozone transport under the 1997 ozone National Ambient Air Quality Standards (NAAQS). The EPA is proposing to update CSAPR to address interstate emission transport with respect to the 2008 ozone NAAQS. The 2008 ozone NAAQS is an 8-hour standard that was set at 75 parts per billion (ppb). *See* 73 FR 16436 (March 27, 2008).

A. Purpose of Regulatory Action

The purpose of this rule is to reduce interstate emission transport that significantly contributes to nonattainment, or interferes with maintenance, of the 2008 ozone NAAQS in the eastern U.S. To achieve this goal, this proposal would further limit ozone season (May 1 through September 30) NO_X emissions from electric generating units (EGUs) in 23 eastern states.

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Ozone causes a variety of negative effects on human health, vegetation, and ecosystems. In humans, acute and chronic exposure to ozone is associated with premature mortality and a number of morbidity effects, such as asthma exacerbation. Ozone exposure can also negatively impact ecosystems.

Studies have established that ozone occurs on a regional scale (i.e., thousands of kilometers) over much of the eastern U.S., with elevated concentrations occurring in rural as well as metropolitan areas. To reduce this regional-scale ozone transport, assessments of ozone control approaches have concluded that NO_X control strategies are most effective. Further, studies have found that EGU NO_X emission reductions can be effective in reducing individual 8-hour peak ozone concentrations and in reducing 8-hour peak ozone concentrations averaged across the ozone season.[1] Specifically, studies indicate that EGUs' emissions, which are generally released higher in the air column through tall stacks and are significant in quantity, may disproportionately contribute to long-range transport of ozone pollution on a per-ton basis.[2]

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[1] Summertime Zero-Out Contributions of regional NO_X and VOC emissions to modeled 8-hour ozone concentrations in the Washington, DC; Philadelphia, PA, and New York City MSAs. "Contributions of regional air pollutant emissions to ozone and fine particulate matter-related mortalities in eastern U.S. urban areas".

[2] Butler, et al., "Response of Ozone and Nitrate to Stationary Source Reductions in the Eastern USA"

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Clean Air Act (CAA or the Act) section 110(a)(2)(D)(i)(I), sometimes called the "good neighbor provision," requires states[3] to prohibit emissions that will contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any primary or secondary NAAQS.

The EPA originally finalized CSAPR on July 6, 2011. *See* 76 FR 48208 (July 6, 2011). CSAPR addresses the 1997 ozone NAAQS and the 1997 and 2006 fine particulate matter ($PM_{2.5}$) NAAQS.[4] (See section IV for a discussion of CSAPR litigation and implementation.)

CSAPR provides a 4-step process to address the requirements of the good neighbor provision for ozone or $PM_{2.5}$ standards: (1) identifying downwind receptors that are expected to have problems attaining or maintaining clean air standards (i.e., NAAQS); (2) determining which upwind states contribute to these identified problems in amounts sufficient to "link" them to the downwind air quality problems; (3) for states linked to downwind air quality problems, identifying upwind emissions that significantly contribute to downwind nonattainment or interfere with downwind maintenance of a standard by quantifying available upwind emission reductions and apportioning upwind

[3] The term "state" has the same meaning as provided in CAA section 302(d) which specifically includes the District of Columbia.
[4] CSAPR did not evaluate the 2008 ozone standard because the 2008 ozone NAAQS was under reconsideration during the analytic work for the rule.

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responsibility among linked states; and (4) for states that are found to have emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS downwind, reducing the identified upwind emissions via regional emissions allowance trading programs. Each time the ozone or $PM_{2.5}$ NAAQS are revised, this process can be applied for the new NAAQS. In this action, the EPA proposes to apply this 4-step process to update CSAPR with respect to the 2008 ozone NAAQS.

Application of this process with respect to the 2008 ozone NAAQS provides the analytic basis for proposing to further limit ozone season EGU NO_X emissions in 23 eastern states. However, the EPA seeks comment on this proposal from all states and stakeholders.

The requirements of this proposal are in addition to existing, on-the-books EPA and state environmental regulations, including the Clean Power Plan (CPP), which is included in the base case for this proposal. On August 3, 2015, President Obama and EPA announced the Clean Power Plan – a historic and important action on emissions that contribute to climate change. The CPP reduces carbon pollution from the power sector. Due to the compliance timeframes of the CPP, the EPA does not anticipate significant interactions with the CPP and the near-term ozone season EGU NO_X emission reduction requirements under

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this proposal. However, states and utilities will be able to make their compliance plans with both programs in mind. Further discussion of the CPP is provided later in this proposal.

In addition to reducing interstate ozone transport with respect to the 2008 ozone NAAQS, this proposal also addresses the status of outstanding interstate ozone transport obligations with respect to the 1997 ozone NAAQS. Under CSAPR, the EPA promulgated FIPs for 25 states to address ozone transport under the 1997 NAAQS. For 11 of these states,[5] in the 2011 final rule, CSAPR quantified ozone season NO_X emission reductions that were not necessarily sufficient to eliminate all significant contribution to downwind nonattainment or interference with downwind maintenance of the 1997 ozone NAAQS downwind. Relying on base case modeling completed for this proposed rulemaking, this action proposes to find that the reductions required by those 11 FIPs were in fact sufficient to eliminate such significant contributions to downwind air quality problems for that standard.

This action also responds to the July 28, 2015 opinion of the Court of Appeals for the District of Columbia (D.C. Circuit) remanding without vacatur 11 states' CSAPR phase 2 NO_X ozone-

[5] Alabama, Arkansas, Georgia, Illinois, Indiana, Kentucky, Louisiana, Mississippi, Missouri, Tennessee, and Texas. (See CSAPR Final Rule, 76 FR at 48220, and the CSAPR Supplemental Rule, 76 FR at 80760, December 27, 2011).

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season emissions budgets. *EME Homer City Generation, L.P., v. EPA*, No. 795 F.3d 118, 129-30, 138 (*EME Homer City II*). This action proposes to respond to that remand by replacing the budgets invalidated by the D.C. Circuit for nine states and by removing two states from the CSAPR NO_X ozone-season trading program.[6]

On October 1, 2015, the EPA strengthened the ground-level ozone NAAQS, based on extensive scientific evidence about ozone's effects on public health and welfare. This proposal to reduce interstate emission transport with respect to the 2008 ozone NAAQS is a separate and distinct regulatory action and is not meant to address the CAA's good neighbor provision with respect to the 2015 ozone NAAQS final rule.

The Clean Air Act gives states the responsibility to address interstate pollution transport through good neighbor State Implementation Plans (SIPs). The EPA supports state efforts to submit good neighbor SIPs for the 2008 ozone NAAQS and has shared information with states to facilitate such SIP submittals. However, in the event that good neighbor SIPs are not submitted or cannot be approved, this rule proposes Federal Implementation Plans (FIPs), as required under section 110(c)(1)

[6] The EPA proposes to replace emissions budgets for Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Texas, Virginia, and West Virginia. The EPA proposes to remove Florida and South Carolina from the CSAPR ozone-season NO_X trading program.

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of the CAA, to establish and implement EGU NO_X reductions identified in this rule.

On July 13, 2015, the EPA published a rule finding that 24 states[7] failed to make complete submissions that address the requirements of section 110(a)(2)(D)(i)(I) related to the interstate transport of pollution as to the 2008 ozone NAAQS. See 80 FR 39961 (July 13, 2015) (effective August 12, 2015). The finding action triggered a 2-year deadline for the EPA to issue FIPs to address the good neighbor provision for these states by August 12, 2017.

The EPA would finalize a FIP for a state that we find has failed to submit a complete good neighbor SIP or for which we issue a final rule disapproving its good neighbor SIP.

The EPA proposes to align implementation of this rule with relevant attainment dates for the 2008 ozone NAAQS, as required by the D.C. Circuit's decision *North Carolina v. EPA*.[8] The EPA's final 2008 Ozone NAAQS SIP Requirements Rule[9] revised the attainment deadline for ozone nonattainment areas currently

[7] The states included in this finding of failure to submit are: Alabama, Arkansas, California, Florida, Georgia, Iowa, Illinois, Kansas, Massachusetts, Maine, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Mexico, North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Vermont, Virginia, and West Virginia.
[8] 531 F.3d 896, 911-12 (D.C. Cir. 2008) (holding that EPA must coordinate interstate transport compliance deadlines with downwind attainment deadlines).
[9] 80 FR 12264, 12268; 40 CFR 51.1103.

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designated as moderate from December 2018 to July 2018 in accordance with the D.C. Circuit's decision in *NRDC v. EPA*.[10] Because July 2018 falls during the 2018 ozone season, the 2017 ozone season will be the last full season from which data can be used to determine attainment of the NAAQS by the July 2018 attainment date. We believe that *North Carolina* compels the EPA to identify upwind reductions and implementation programs to achieve these reductions, to the extent possible, for the 2017 ozone season.

In order to apply the first and second steps of the CSAPR 4-step process to interstate transport for the 2008 ozone NAAQS, the EPA used air quality modeling to project ozone concentrations at air quality monitoring sites to 2017. The EPA evaluated these modeling projections for the air quality monitoring sites and considered current ozone monitoring data at these sites to identify receptors that are anticipated to have problems attaining or maintaining the 2008 ozone NAAQS. The EPA then used air quality modeling to evaluate contributions from upwind states to these downwind receptors.

CSAPR and previous federal transport rules, such as the NO_X SIP Call and the Clean Air Interstate Rule (CAIR) – discussed in detail below - addressed collective contributions of ozone

[10] 777 F.3d 456, 469 (D.C. Cir. 2014).

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pollution from states in the eastern U.S. These rules did not address contributions in the 11 western contiguous United States.[11] There may be additional criteria to evaluate regarding collective contribution of transported air pollution in the West, such as those raised in EPA-state meetings to discuss approaches for determining how emissions in upwind states impact air quality in downwind states.[12] Given that the near-term 2017 implementation timeframe constrains the opportunity to conduct evaluations of additional criteria, the EPA proposes to focus this rulemaking on eastern states. This focus would not relieve western states of obligations to address interstate transport under the Act. The EPA and western states, working together, would continue to evaluate interstate transport on a case-by-case basis. While the EPA proposes to focus this rulemaking on eastern states, we seek comment on whether to include western states in this rule.

To apply the third step of the 4-step process, the EPA assessed ozone season NO_X reductions that are achievable for the 2017 ozone season. This assessment reveals that there is significant EGU NO_X reduction potential that can be achieved for

[11] For the purpose of this action, the western U.S. (or the West) consists of the 11 western contiguous states of Arizona, California, Colorado, Idaho, Montana, New Mexico, Nevada, Oregon, Utah, Washington, and Wyoming.

[12] For example, EPA-State meetings held in Research Triangle Park, NC on April 8, 2013 and Denver, Colorado on April 17, 2013.

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2017 at reasonable cost, which would make meaningful and timely improvements in ozone air quality. The EPA applied a multi-factor test to evaluate EGU NO_X reduction potential for 2017 and proposes to quantify EGU NO_X ozone-season emissions budgets reflecting emission reductions from cost-effective pollution control measures achievable for the 2017 ozone season (estimated to obtain NO_X reductions at a uniform cost of approximately $1,300 per ton).

The EPA is not proposing to quantify non-EGU emission reductions to reduce interstate ozone transport for the 2008 ozone NAAQS at this time because we are uncertain that significant NO_X mitigation is achievable from non-EGUs for the 2017 ozone season. The EPA will continue to evaluate whether non-EGU emission reductions can be achieved on a longer time-frame at a future date. However, as explained later in this notice, this proposal seeks comment on a preliminary evaluation of stationary non-EGU NO_X mitigation potential and on allowing a state to include legacy NO_X SIP Call non-EGUs in the CSAPR trading program by adopting a SIP revision that the EPA would approve as modifying the CSAPR trading program provisions with regard to that state.

To evaluate full elimination of a state's significant contribution to nonattainment and interference with maintenance,

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EGU and non-EGU ozone season NO_X reductions should both be evaluated. To the extent air quality impacts persist after implementation of the NO_X reductions identified in this rule, a final judgment on whether the proposed EGU NO_X reductions represent a full or partial elimination of a state's good neighbor obligation for the 2008 NAAQS is therefore subject to an evaluation of the contribution to interstate transport from additional non-EGU emission sectors.

However, the EPA believes that it is beneficial to implement, without further delay, EGU NO_X reductions since they are achievable in the near term. Generally, notwithstanding that additional reductions may be required to fully address the states' interstate transport obligations, the proposed NO_X emission reductions are needed for these states to eliminate their significant contribution to nonattainment and interference with maintenance of the 2008 ozone NAAQS and needed for downwind states with ozone nonattainment areas that are required to attain the standard by 2018.[13]

At the same time, the EPA also notes that section 110(a)(2)(D)(i)(I) of the CAA only requires upwind states to prohibit emissions that will significantly contribute to

[13] The proposed requirements for one state, North Carolina, would fully eliminate that state's significant contribution to downwind air quality problems.

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nonattainment or interfere with maintenance of the NAAQS in other states. It does not shift to upwind states the full responsibility for ensuring that all areas in other states attain and maintain the NAAQS. Downwind states also have control responsibilities because, among other things, the Act requires each state to adopt enforceable plans to attain and maintain air quality standards. The requirements established for upwind states through this proposed rule will supplement downwind states' local emission control strategies that, in conjunction with the certainty on maximum allowable upwind state EGU emissions that this proposed rule would provide, promote attainment and maintenance of the 2008 ozone NAAQS.

To meet the fourth step of the 4-step process (i.e., implementation) the proposed FIPs contain enforceable measures necessary to achieve the emission reductions in each state. The proposed FIPs would require power plants in affected states (i.e., states that significantly contribute to ozone transport in the east) to participate in the CSAPR NO_X ozone-season allowance trading program (as modified by the proposed changes described elsewhere in this notice). CSAPR's trading programs and EPA's prior emissions trading programs provide a proven implementation framework for achieving emission reductions. In addition to providing environmental certainty (i.e., a cap on

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emissions), these programs also provide regulated sources with flexibility in choosing compliance strategies. By using the existing CSAPR NO_X ozone-season allowance trading program, the EPA is proposing to use an implementation framework that was shaped by notice and comment in previous rulemakings and reflects the evolution of these programs in response to court decisions. Further, this program is familiar to the EGUs that will be regulated under this rule, which means that monitoring, reporting, and compliance will be done as it already is under CSAPR's current ozone-season and annual programs.[14]

These FIP requirements, if finalized, would begin with the 2017 ozone season and would continue for subsequent ozone seasons to ensure that upwind states included in this rule meet their Clean Air Act obligation to address interstate emissions transport with respect to the 2008 ozone NAAQS for 2017 and future years. To the extent that emissions in an included state would otherwise exceed the promulgated emission level, these good neighbor EGU emissions limits will ensure that future emissions are consistent with states' ongoing good neighbor obligations. To the extent that emissions in an included state would be reduced for other reasons, for example planned lower-NO_X

[14] One state, Kansas, would have a new CSAPR ozone season requirement under this proposal. Kansas currently participates in the CSAPR NO_X and SO_2 annual programs. The remaining 22 states were included in the original CSAPR ozone-season program as to the 1997 ozone NAAQS.

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emitting generation coming online, then those actions will help the state comply with its good neighbor requirements.

Generally, for states that would be affected by one of the FIPs proposed in this action and that are already included in the CSAPR NO_X ozone-season trading program to address interstate ozone transport for the 1997 NAAQS, this action proposes to revise the existing part 97 regulations that define that program to incorporate lower EGU NO_X ozone-season emissions budgets for each of the affected states in order to reduce ozone transport for the 2008 ozone NAAQS.[15] If finalized, compliance with these lower emissions budgets for the 2008 ozone NAAQS would also satisfy compliance with the existing higher emissions budgets for the 1997 ozone NAAQS. Therefore, the EPA proposes to replace the existing CSAPR emissions budgets (i.e. for the 1997 ozone NAAQS) for the affected states with the lower emissions budgets proposed to reduce ozone transport for the 2008 ozone NAAQS. Compliance with the final lower emissions budgets for the 2008 ozone NAAQS would supersede compliance with the CSAPR NO_X ozone-season budgets for the 1997 ozone NAAQS. This action would therefore respond to the remand of *EME Homer City II* with respect to the NO_X ozone-season emissions budgets for nine

[15] One state, Kansas, would have a new CSAPR ozone season requirement under this proposal. The remaining 22 states were included in the original CSAPR ozone-season program as to the 1997 ozone NAAQS.

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states[16] by replacing the budgets declared invalid by the court with revised budgets designed to address the 2008 ozone NAAQS.

The proposed FIPs, if finalized, would not limit states' flexibility in meeting their CAA requirements, as any state included in this rule can submit a good neighbor SIP at any time that, if approved by the EPA, could replace the FIP for that state. Additionally, CSAPR already provides states with the option to submit abbreviated SIPs to customize the methodology for allocating NO_X ozone-season allowances while participating in the ozone-season trading program and we propose to continue that approach in this rule.

The EPA therefore proposes revisions to the Code of Federal Regulations, specifically 40 CFR part 97, subpart BBBBB (federal CSAPR NO_X ozone-season trading program); 40 CFR 52.38(b) (rules on replacing or modifying the federal CSAPR NO_X ozone-season trading program with a SIP); 40 CFR 52.540, 52.882, and 52.2140 (adding or limiting requirements for EGUs in certain individual states to participate in the CSAPR NO_X ozone-season trading program); and 40 CFR 78.1 (modifying the list of decisions subject to administrative appeal procedures under part 78) to address interstate transport for the 2008 ozone NAAQS. In addition, various minor corrections are proposed to these CFR

[16] The EPA proposes to replace emissions budgets for Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Texas, Virginia, and West Virginia.

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sections and other sections of parts 52, 78, and 97 relating to the CSAPR ozone-season and annual trading programs.

The 23 eastern states for which the EPA proposes to promulgate FIPs to reduce interstate ozone transport as to the 2008 ozone NAAQS are listed in Table I-1.

Table I-A-1 Proposed List of Covered States for the 2008 8-Hour Ozone NAAQS

State Name
Alabama
Arkansas
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maryland
Michigan
Mississippi
Missouri
New Jersey
New York
North Carolina
Ohio
Oklahoma
Pennsylvania
Tennessee
Texas
Virginia
West Virginia
Wisconsin

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For eastern states for which the EPA is not proposing FIPs in this action, the EPA notes that updates to the modeling for the final rule, made based on comments received on the proposal, could change the analysis as to which states significantly contribute to nonattainment or interfere with maintenance. In this regard, the final modeling could result in additional states being included in the final rule. Therefore, the EPA provides all data and methods necessary for all eastern states to comment on all aspects of this proposal in the Ozone Transport Policy Analysis TSD. This information includes EGU NO_X ozone-season emissions budgets for all eastern states, in the event that final rule modeling demonstrates that additional states significantly contribute to downwind air quality problems.

The EPA notes that the annual $PM_{2.5}$ NAAQS was updated after CSAPR was promulgated (78 FR 306, January 15, 2013). However, this rule does not address the 2012 $PM_{2.5}$ standard. The EPA acknowledges that, in *EME Homer City II*, the D.C. Circuit also remanded without vacatur the CSAPR phase 2 SO_2 emissions budgets as to four states. 795 F.3d at 129, 138. This proposal does not address the remand of these CSAPR phase 2 SO_2 annual emissions budgets. The EPA intends to address the remand of the phase 2 SO_2 annual emissions budgets separately. The existing CSAPR

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emissions budgets and implementation programs (CSAPR SO_2 annual and NO_X annual requirements), which address interstate transport for the 1997 and 2006 $PM_{2.5}$ NAAQS, continue to apply at this time.

B. Major Provisions

The major provision of this action are described in the remainder of this preamble and organized as follows: section III describes the human health and environmental context, the EPA's overall approach for addressing interstate transport, and the EPA's response to the remand of certain CSAPR NO_X ozone-season emissions budgets; section IV describes the EPA's legal authority for this action; section V describes the air quality modeling platform and emission inventories that the EPA used to identify downwind receptors of concern and upwind state ozone contributions to those receptors; section VI describes the EPA's proposed approach to quantify upwind state obligations in the form of EGU NO_X emissions budgets; section VII details the implementation requirements including key elements of the CSAPR allowance trading program and deadlines for compliance; section VIII describes the expected costs, benefits, and other impacts of this proposed rule; section IX discusses proposed changes to the existing regulatory text for the CSAPR FIPs and the CSAPR trading programs; and section X discusses the statutes and

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executive orders affecting this rulemaking. The EPA invites comment on this proposed rulemaking.

C. Benefits and Costs

The proposed rule would achieve near-term emission reductions from the power sector, lowering ozone season NO_X in 2017 by 85,000 tons, compared to baseline 2017 projections without the rule.

Consistent with Executive Order 13563, "Improving Regulation and Regulatory Review," we have estimated the costs and benefits of the proposed rule. Estimates here are subject to uncertainties discussed further in the Regulatory Impact Analysis (RIA) in the docket. The estimated net benefits of the proposed rule at a 3 percent discount rate are $700 million to $1.2 billion (2011$). The non-monetized benefits include reduced ecosystem effects and reduced visibility impairment. Discussion of the costs and benefits of the proposal is provided in preamble section VIII, below, and in the RIA, which is found in the docket for this proposed rulemaking. The EPA's estimate of the proposed rule's costs and quantified benefits is summarized in Table I.C-1, below.

Table I.C-1 Summary of Compliance Costs, Monetized Benefits, and Monetized Net Benefits of the Proposed Rule for 2017 (2011$)

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Description	Impacts at 3 percent discount rate ($ millions)
Annualized Compliance Costs [a]	$93
Monetized benefits [b]	$700 to $1,200
Net benefits (benefits-costs	$620 to $1,200

[a] Total annualized social costs are estimated at a 3 percent discount rate. The social costs presented here reflect the EGU ozone season costs of complying with the proposed FIPs.
[b] Total monetized benefits are estimated at a 3 percent discount rate. The total monetized benefits reflect the human health benefits associated with reducing exposure to ozone and $PM_{2.5}$. It is important to note that the monetized benefits and co-benefits include many but not all health effects associated with pollution exposure. Benefits are shown as a range reflecting studies from Krewski et al. (2009) with Smith et al. (2009) to Lepeule et al. (2012) with Zanobetti and Schwartz (2008).

II. General Information

A. To Whom Does This Action Apply?

This rule affects EGUs, and regulates the following groups:

Industry Group	NAICS*
Fossil fuel-fired electric power generation	221112

*North American Industry Classification System

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that the EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your entity is regulated by this action, you should carefully examine the applicability

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criteria found in 40 CFR 97.504. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the FOR FURTHER INFORMATION CONTACT section.

III. Air Quality Issues Addressed and Overall Approach for the Proposed Rule

A. The Interstate Transport Challenge under the 2008 Ozone Standard.

1. Background on the Overall Nature of the Interstate Ozone Transport Problem

Interstate transport of NO_X emissions poses significant challenges with respect to the 2008 ozone NAAQS in the eastern U.S. and thus presents a threat to public health and welfare.

a. Nature of Ozone and the Ozone NAAQS

Ground-level ozone is not emitted directly into the air, but is created by chemical reactions between NO_X and volatile organic compounds (VOC) in the presence of sunlight. Emissions from electric utilities and industrial facilities, motor vehicles, gasoline vapors, and chemical solvents are some of the major sources of NO_X and VOC.

Because ground-level ozone formation increases with temperature and sunlight, ozone levels are generally higher

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during the summer. Increased temperature also increases emissions of volatile man-made and biogenic organics and can indirectly increase NO_X emissions as well (e.g., increased electricity generation for air conditioning).

The 2008 primary and secondary ozone standards are both 75 parts per billion (ppb) as an 8-hour level. Specifically, the standards require that the 3-year average of the fourth highest 24-hour maximum 8-hour average ozone concentration may not exceed 75 ppb.

b. *Ozone Transport*

Studies have established that ozone formation, atmospheric residence, and transport occurs on a regional scale (i.e., thousands of kilometers) over much of the eastern U.S., with elevated concentrations occurring in rural as well as metropolitan areas. While substantial progress has been made in reducing ozone in many urban areas, regional-scale ozone transport is still an important component of peak ozone concentrations during the summer ozone season.

The EPA has previously concluded in the NO_x SIP Call, CAIR, and CSAPR that, for reducing regional-scale ozone transport, a NO_X control strategy would be most effective. NO_X emissions can be transported downwind as NO_X or, after transformation in the atmosphere, as ozone. As a result of ozone transport, in any

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given location, ozone pollution levels are impacted by a combination of local emissions and emissions from upwind sources. The transport of ozone pollution across state borders compounds the difficulty for downwind states in meeting health-based air quality standards (i.e., NAAQS).

Recent assessments of ozone, for example those conducted for the October 2015 Regulatory Impact Analysis of the Final Revisions to the National Ambient Air Quality Standards for Ground-Level Ozone (EPA-452/R-15-007) continue to show the importance of NO_X emissions on ozone transport. This analysis is in the docket for this proposal and can be also found at the EPA's website at: http://www3.epa.gov/ozonepollution/pdfs/20151001ria.pdf .

There are five general categories of NO_X emission sources: EGUs, non-EGU point, onroad mobile, non-road mobile, and area. Studies have found that EGU NO_X emission reductions can be effective in reducing individual 8-hour peak ozone concentrations and in reducing 8-hour peak ozone concentrations averaged across the ozone season. For example, a study that evaluates the effectiveness on ozone concentrations of EGU NO_X reductions achieved under the NO_X Budget Trading Program shows that regulating NO_X emissions has been highly effective in reducing both ozone and dry-NO_3 concentrations during the ozone

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season. Further, this study indicates that EGU emissions, which are generally released higher in the air column through tall stacks and are significant in quantity, may disproportionately contribute to long-range transport of ozone pollution on a per-ton basis.[17] Another study shows that EGU NO_X emissions can contribute between 5 ppb and 25 ppb to average 8-hour peak ozone concentrations in mid-Atlantic metropolitan statistical areas.[18]

Previous regional ozone transport efforts, including the NO_X SIP Call, CAIR, and CSAPR, required ozone season NO_X reductions from EGUs to address interstate transport of ozone. The EPA has taken comment on regulating EGU NO_X emissions to address interstate ozone transport in the notice-and-comment process for these rulemakings. The EPA received no significant adverse comments in any of these proposals regarding the rules' focus on ozone season EGU NO_X reductions to address interstate ozone transport.

As described later in this notice, the EPA's analysis finds that the power sector continues to be capable of making NO_X reductions at reasonable cost that reduce interstate transport

[17] Butler, et al., "Response of Ozone and Nitrate to Stationary Source Reductions in the Eastern USA"

[18] Summertime Zero-Out Contributions of regional NO_X and VOC emissions to modeled 8-hour ozone concentrations in the Washington, DC; Philadelphia, PA, and New York City MSAs. "Contributions of regional air pollutant emissions to ozone and fine particulate matter-related mortalities in eastern U.S. urban areas".

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with respect to ground-level ozone. EGU NO_X emission reductions can be made in the near-term under this proposal by fully operating existing EGU NO_X post-combustion controls (i.e., Selective Catalytic Reduction and Selective Non-Catalytic Reduction) – including optimizing NO_X removal by existing, operational controls and turning on and optimizing existing idled controls; installation of (or upgrading to) state-of-the-art NO_X combustion controls; and shifting generation to units with lower NO_X emission rates. Further, additional assessment reveals that these available EGU NO_X reductions would make meaningful and timely improvements in ozone air quality.

The Clean Air Act's good neighbor provision requires states and the EPA to address interstate transport of air pollution that affects downwind states' ability to attain and maintain NAAQS. Other provisions of the CAA, namely sections 179B and 319(b), are available to deal with NAAQS exceedances not attributable to the interstate transport of pollution covered by the good neighbor provisions but caused by emission sources outside the control of a downwind state. These provisions

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address international transport and exceptional events, respectively.[19],[20]

c. Health and Environmental Effects

Exposure to ambient ozone causes a variety of negative effects on human health, vegetation, and ecosystems. In humans, acute and chronic exposure to ozone is associated with premature mortality and a number of morbidity effects, such as asthma exacerbation. In ecosystems, ozone exposure causes visible foliar injury, decreases plant growth, and affects ecosystem community composition. See the EPA's November 2014 Regulatory Impact Analysis of the Proposed Revisions to the National Ambient Air Quality Standards for Ground-Level Ozone (EPA-452/P-14-006), in the docket for this proposal and available on the

[19] The EPA recognizes that both in-state and upwind wildfires may contribute to monitored ozone concentrations. The EPA encourages all states to consider how the appropriate use of prescribed fire may benefit of public safety and health by resulting in fewer ozone exceedances for both the affected state and their neighboring states.

[20] The CAA and the EPA's implementing regulations, specifically the Exceptional Events Rule at 40 CFR 50.14, allow for the exclusion of air quality monitoring data from regulatory determinations when events, including wildland fires, contribute to NAAQS exceedances or violations if they meet certain requirements, including the criterion that the event be not reasonably controllable or preventable. Wildland fires can be of two types: wildfire (unplanned) and prescribed fire (planned). Under the Exceptional Events Rule, wildfires are considered, by their nature, to be not reasonably controllable or preventable. Because prescribed fires on wildland are intentionally ignited for resource management purposes, to meet the not reasonably controllable or preventable criterion, they must be conducted under a certified Smoke Management Program or employ basic smoke management practices. Both types of wildland fire must also satisfy the other rule criteria. The EPA will soon propose revisions to the Exceptional Events Rule and release a draft guidance document, which applies the proposed rule revisions to wildfire events that could influence ozone concentrations. These actions, which the EPA intends to finalize in the summer of 2016, further clarify the treatment of wildland fires under the Exceptional Events Rule.

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EPA's website at:

http://www.epa.gov/ttn/ecas/regdata/RIAs/20141125ria.pdf, for more information on the human health and welfare and ecosystem effects associated with ambient ozone exposure.

2. Events Affecting Application of the Good Neighbor Provision for the 2008 Ozone NAAQS

The 2008 revisions to the ozone NAAQS were promulgated on March 12, 2008. *See* National Ambient Air Quality Standards for Ozone, Final Rule, 73 FR 16436 (March 27, 2008). The revision of the NAAQS, in turn, triggered a 3-year deadline of March 12, 2011, for states to submit SIP revisions addressing infrastructure requirements under CAA sections 110(a)(1) and 110(a)(2), including the good neighbor provision. During this 3-year SIP development period, on September 16, 2009, the EPA announced[21] that it would reconsider the 2008 ozone NAAQS. To reduce the workload for states during the interim period of reconsideration, the EPA also announced its intention to propose staying implementation of the 2008 standards for a number of the requirements. On January 6, 2010, the EPA proposed to revise the 2008 NAAQS for ozone from 75 ppb to a level within the range of 60 to 70 ppb. *See* 75 FR 2938 (January 19, 2010). The EPA

[21] Fact Sheet. The EPA to reconsider Ozone Pollution Standards. *http://www.epa.gov/groundlevelozone/pdfs/O3_Reconsideration_FACT%20SHEET_091609.pdf*

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indicated its intent to issue final standards based upon the reconsideration by summer 2011.

On July 6, 2011, the EPA finalized CSAPR, in response to the D.C. Circuit's remand of the EPA's prior federal transport rule, CAIR. *See* 76 FR 48208 (July 6, 2011). CSAPR addresses ozone transport under the 1997 ozone NAAQS, but does not address the 2008 ozone standard, because the 2008 ozone NAAQS was under reconsideration during the analytic work for the rule.

On September 2, 2011, consistent with the direction of the President, the Administrator of the Office of Information and Regulatory Affairs of the Office of Management and Budget returned the draft final 2008 ozone rule EPA had developed upon reconsideration to the Agency for further consideration.[22] In view of this direction and the timing of the agency's ongoing periodic review of the ozone NAAQS required under CAA section 109 (as announced on September 29, 2008), the EPA decided to coordinate further proceedings on its voluntary reconsideration rulemaking of the 2008 ozone standard with that of its ongoing periodic review of the ozone NAAQS.[23] Implementation for the original 2008 ozone standard was renewed. However, during this

[22] *See* Policy Assessment for the Review of the Ozone National Ambient Air Quality Standards, August 2014, *http://www.epa.gov/ttn/naaqs/standards/ozone/data/20140829pa.pdf,* at 1-9.
[23] *Id.*

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time period, a number of legal developments pertaining to the EPA's promulgation of CSAPR created uncertainty surrounding the EPA's statutory interpretation and implementation of the good neighbor provision.

On August 21, 2012, the D.C. Circuit issued a decision in *EME Homer City Generation, L.P. v. EPA* addressing several legal challenges to CSAPR and holding, among other things, that states had no obligation to submit good neighbor SIPs until the EPA had first quantified each state's good neighbor obligation.[24] According to that decision, the submission deadline for good neighbor SIPs under the CAA would not necessarily be tied to the promulgation of a new or revised NAAQS. While the EPA disagreed with this interpretation of the statute and sought review of the decision in the D.C. Circuit and the U.S. Supreme Court, the EPA complied with the D.C. Circuit's ruling during the pendency of its appeal. In particular, the EPA indicated that, consistent with the D.C. Circuit's opinion, it would not at that time issue findings that states had failed to submit SIPs addressing the good neighbor provision.[25]

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[24] *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7, 31 (D.C. Cir. 2012).

[25] *See, e.g.*, Memorandum from the Office of Air and Radiation former Assistant Administrator Gina McCarthy to the EPA Regions, "Next Steps for Pending Redesignation Requests and State Implementation Plan Actions Affected by the Recent Court Decision Vacating the 2011 Cross-State Air Pollution Rule," November 19, 2012; 78 FR 65559 (November 1,

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On January 23, 2013, the Supreme Court granted the EPA's petition for certiorari.[26] During 2013 and early 2014, as the EPA awaited a decision from the Supreme Court, the EPA initiated efforts and technical analyses aimed at identifying and quantifying state good neighbor obligations for the 2008 ozone NAAQS. As part of this effort, the EPA solicited stakeholder input and also provided states with, and requested input on, emissions inventories for 2011 (78 FR 70935, November 27, 2013) and inventory projections for 2018 (79 FR 2437, January 14, 2014).

On April 29, 2014, the Supreme Court reversed the D.C. Circuit's *EME Homer City* opinion on CSAPR and held, among other things, that under the plain language of the CAA, states must submit SIPs addressing the good neighbor provision within 3 years of promulgation of a new or revised NAAQS, regardless of whether the EPA first provides guidance, technical data, or rulemaking to quantify the state's obligation.[27] Thus, the Supreme Court affirmed that states have an obligation in the

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2013) (final action on Florida infrastructure SIP submission for 2008 8-hour ozone NAAQS); 78 FR 14450 (March 6, 2013) (final action on Tennessee infrastructure SIP submissions for 2008 8-hour ozone NAAQS); Final Rule, Findings of Failure To Submit a Complete State Implementation Plan for Section 110(a) Pertaining to the 2008 Ozone National Ambient Air Quality Standard, 78 FR 2884 (January 15, 2013).

[26] *EPA v. EME Homer City Generation, L.P.*, 133 S. Ct. 2857 (2013) (granting the EPA's and other parties' petitions for certiorari).

[27] *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584, 1600-01 (2014).

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first instance to address the good neighbor provision after promulgation of a new or revised NAAQS, a holding that also applies to states' obligation to address transport for the 2008 ozone NAAQS.

The Supreme Court holding affirmed that states were required to submit SIPs addressing the good neighbor provision with respect to the 2008 ozone NAAQS by March 12, 2011. To the extent that states have failed to submit SIPs to meet this statutory obligation, then the EPA has not only the authority, but the obligation, to promulgate FIPs to address the CAA requirement.

Following the remand of the case to the D.C. Circuit, the EPA requested that the court lift the CSAPR stay and toll the CSAPR compliance deadlines by three years. On October 23, 2014, the D.C. Circuit granted the EPA's request. The EPA issued an interim final rule to revise the regulatory deadlines in CSAPR to reflect the three-year delay in implementation. Accordingly, CSAPR phase 1 implementation began in 2015 and phase 2 will begin in 2017.[28]

On March 6, 2015, the EPA's final 2008 Ozone NAAQS SIP Requirements Rule[29] revised the attainment deadline for ozone

[28] 79 FR 71663 (December 3, 2014).
[29] 80 FR 12264, 12268 (Mar. 6, 2015); 40 CFR 51.1103.

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nonattainment areas currently designated as moderate to July 2018. In order to demonstrate attainment by the deadline, the demonstration would have to be based on design values calculated using 2015 through 2017 ozone season data, since the July 2018 deadline does not afford a full ozone season of measured data. The EPA established this deadline in the 2015 Ozone SIP Requirements Rule after previously establishing a deadline of December 31, 2018, that was vacated by the D.C. Circuit Court in *Natural Resources Defense Council v. EPA*.[30]

On July 28, 2015, the D.C. Circuit issued its opinion regarding CSAPR on remand from the Supreme Court, *EME Homer City II*, 795 F.3d 118. The court largely upheld CSAPR, but remanded to EPA without vacatur certain states' emissions budgets for reconsideration. This proposal responds to the remand of certain CSAPR NO_X ozone-season emissions budgets to the EPA for reconsideration; see section C below. Regarding the remand of CSAPR phase 2 SO_2 annual emissions budgets as to four states, this proposal does not address that particular aspect of the D.C. Circuit opinion. The EPA intends to address the remand of the phase 2 SO_2 annual emissions budgets separately.

B. Proposed Approach to Address Ozone Transport under the 2008 Ozone NAAQS via FIPs

[30] 777 F.3d 456 (D.C. Cir. 2014).

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1. The CSAPR Framework

CSAPR establishes a 4-step process to address the requirements of the good neighbor provision.[31] The EPA proposes to follow the same steps for this rule with respect to the 2008 ozone NAAQS. These steps are: (1) identifying downwind receptors that are expected to have problems attaining or maintaining clean air standards (i.e., NAAQS); (2) determining which upwind states contribute to these identified problems in amounts sufficient to "link" them to the downwind air quality problems; (3) for states linked to downwind air quality problems, identifying upwind emissions that significantly contribute to nonattainment or interfere with maintenance of a standard by quantifying available upwind emission reductions and apportioning upwind responsibility among linked states; and (4) for states that are found to have emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS downwind, reducing the identified upwind emissions via regional emissions allowance trading programs.

Step 1 – In the original CSAPR, downwind air quality problems were assessed using modeled future air quality concentrations for a year aligned with attainment deadlines for the NAAQS considered in that rulemaking. The assessment of

[31] *See* CSAPR, Final Rule, 76 FR 48208 (August 8, 2011).

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future air quality conditions generally accounts for on-the-books emission reductions[32] and the most up-to-date forecast of future emissions in the absence of the transport policy being evaluated (i.e., base case conditions). The locations of downwind air quality problems are identified as those with receptors that are projected to be unable to attain (i.e., nonattainment receptor) or maintain (i.e., maintenance receptor) the standard. This proposal follows this same general approach. However, the EPA also proposes to consider current monitored air quality data to further inform the projected identification of downwind air quality problems for this proposal. Further details and application of step one for this proposal are described in section V of this notice.

Step 2 – The original CSAPR used a screening threshold of one percent of the NAAQS to identify upwind states that were "linked" to downwind air pollution problems. States were identified as needing further evaluation for actions to address transport if their air quality impact[33] was greater than or equal to the threshold for at least one downwind problem receptor (i.e., nonattainment or maintenance receptor identified in step 1). We evaluated a given state's contribution based on the

[32] Since CSAPR was designed to replace CAIR, CAIR emissions reductions were not considered "on-the-books."

[33] For ozone the impacts would include those from volatile organic compounds (VOC) and NO_X, and from all sectors.

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average relative downwind impact calculated over multiple days. States whose air quality impacts to all downwind problem receptors were below this threshold did not require further evaluation for actions to address transport — that is, these states were determined to make insignificant contributions to downwind air quality problems and therefore have no emission reduction obligations under the good neighbor provision. The EPA used this threshold because much of the ozone nonattainment problem in the eastern half of the United States results from relatively small contributions from a number of upwind states. Use of the one percent threshold for CSAPR is discussed in the preambles to the proposed and final CSAPR rules. *See* 75 FR 45237 (Aug. 2, 2010); 76 FR 48238, (Aug. 8, 2011). The EPA proposes to use this same approach for this rule. Application of step two for this proposal is described in section V of this notice.

Step 3 – For states that are linked in step 2 to downwind air quality problems, the original CSAPR used a multi-factor test to evaluate emission reductions available in upwind states by application of uniform cost thresholds. The EPA evaluated NO_X reductions that were available in upwind states by applying a marginal cost of NO_X emissions to entities in these states. This approach, in essence, simulated placing an economic value on NO_X emissions and evaluated emission reduction potential that was

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cost-effective under this constraint. The EPA evaluated NO_X reduction potential, cost, and downwind air quality improvements available at several cost thresholds in the multi-factor test. This evaluation quantified the magnitude of emissions that significantly contribute to nonattainment or interfere with maintenance of a NAAQS downwind and apportioned upwind responsibility among linked states, an approach upheld by the U.S. Supreme Court in *EPA v. EME Homer City*.[34] The EPA proposes to apply this approach to identify NO_X emission reductions necessary to reduce interstate transport for the 2008 ozone NAAQS, updated to also explicitly consider over-control. For this proposal, the multi-factor test is also used to evaluate possible over-control by evaluating if an upwind state is linked solely to downwind air quality problems that are resolved at a given cost threshold, or if upwind states would reduce their emissions at a given cost threshold to the extent that they would no longer meet or exceed the 1% air quality contribution threshold. This evaluation of cost, NO_X reductions, and air quality improvements, including its consideration of potential over-control, results in the EPA's determination of upwind emissions that significantly contribute to nonattainment or

[34] *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584, 1606-07 (2014).

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interfere with maintenance of the NAAQS downwind. Next, emissions budgets are determined. Emissions budgets are remaining allowable emissions after the elimination of emissions identified as significantly contributing to nonattainment or interfering with maintenance of the standard downwind. The EPA's assessment of significant contribution to nonattainment and interference with maintenance and development of EGU NO_X ozone-season emissions budgets is described in section VI of this notice.

Step 4 – Finally, the original CSAPR used allowance trading programs to implement the necessary emission reductions. Specifically, the emissions budgets identified in step 3 were implemented via a tradable allowance program. Emissions allowances were issued to units covered by the trading program and the allowances can be turned in at the close of each compliance period to account for a specified amount of ozone season EGU NO_X emissions. Additionally, the original CSAPR included variability limits, which define the amount by which collective emissions within a state may exceed the level of the budgets in a given year to account for variability in EGU operations. CSAPR set assurance levels equal to the sum of each state's emissions budget plus its variability limit. The original CSAPR included assurance provisions that help to assure

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that state emissions remain below the assurance levels in each state by requiring additional allowance surrenders in the instance that emissions in the state exceed the state's assurance level. This limited interstate trading approach is responsive to previous court decisions (see discussion in section IV of this preamble) and has been upheld in subsequent litigation regarding CSAPR. The EPA proposes to apply this approach to reduce interstate transport for the 2008 ozone NAAQS. Implementation using the CSAPR allowance trading program is described in section VII of this notice.

2. Partial versus Full Resolution of Transport Obligation

Given the unique circumstances surrounding the implementation of the 2008 ozone standard that have delayed state and EPA efforts to address interstate transport, at this time the EPA is focusing its efforts on the immediately available and cost-effective emission reductions that are achievable by the 2017 ozone season.

a. Partial Remedy under Proposed FIPs

This rule proposes to establish (or revise currently established) FIPs for 23 eastern states under the good neighbor provision of the CAA. These FIPs contain requirements for EGUs in these states to reduce ozone season NO_X emissions for the 2017 ozone season. As noted in section VI, the EPA has identified

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important EGU emission reductions that are achievable starting for the 2017 ozone season in each of the covered states through actions such as turning on and operating existing pollution controls. These readily available emission reductions will assist downwind states to attain and maintain the 2008 ozone NAAQS and will provide human health and welfare benefits through reduced exposure to ozone pollution.

While these reductions are necessary to assist downwind states attain and maintain the 2008 ozone NAAQS and are necessary to address good neighbor obligations for these states, the EPA acknowledges that they may not be sufficient to fully address these states' good neighbor obligations.[35] With respect to the 2008 ozone standard, the EPA has generally not attempted to quantify the ozone season NO_X reductions that may be necessary to eliminate all significant contribution to nonattainment and interference with maintenance in other states. Given the time constraints for implementing NO_X reduction strategies, the EPA believes that implementation of a full remedy may not be achievable for 2017, even though a partial remedy is achievable.

To evaluate full elimination of a state's significant contribution to nonattainment and interference with maintenance,

[35] The proposed requirements for one state, North Carolina, would fully eliminate that state's significant contribution to downwind air quality problems.

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EGU and non-EGU ozone season NO_X reductions should both be evaluated. However, the EPA is not proposing to quantify non-EGU emissions reductions to address interstate ozone transport for the 2008 ozone NAAQS at this time because: (1) there is greater uncertainty in the non-EGU emission inventory estimates than for EGUs; and (2) there appear to be few non-EGU reductions that could be accomplished by the beginning of the 2017 ozone season. This is discussed further in section VI of this proposal and in the Non-EGU NO_X Mitigation Strategies TSD. We intend to continue to collect information and undertake analysis for potential future emissions reductions at non-EGUs that may be necessary to fully quantify states' significant contributions in a future action.

Because the reductions proposed in this action are EGU-only and because EPA has focused the policy analysis for this proposal on reductions available by 2017, for most states they represent a first, partial step to addressing a given upwind state's significant contribution to downwind air quality impacts for the 2008 ozone NAAQS. Generally, a final determination of whether the proposed EGU NO_X reductions represent a full or partial elimination of a state's good neighbor obligation for the 2008 NAAQS is subject to an evaluation of the contribution to interstate transport from additional emission sectors, such

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as non-EGUs. However, the EPA believes that it is beneficial to implement, without further delay, EGU NO_X reductions that are achievable in the near term. The proposed NO_X emission reductions are needed (although they may not be all that is needed) for these states to eliminate their significant contribution to nonattainment and interference with maintenance of the 2008 ozone NAAQS. The EPA's current statutory deadlines to promulgate FIPs extend until 2017 for most states, and the EPA will remain mindful of those deadlines as it evaluates what further steps may be necessary to address interstate transport for the 2008 ozone NAAQS. The EPA seeks comment on possible future steps that may be necessary to resolve the remainder of the good neighbor obligation for the 2008 ozone standard.

The EPA has shared information with states to facilitate the development of the ozone transport SIPs.[36] The EPA encourages state SIP development and will continue to assist states in developing transport SIPs regardless of whether they are covered by this proposed FIP. Where a state would be covered by this proposed FIP, the EPA may be able to partially approve SIPs that

[36] On January 22, 2015, the EPA issued a memo with preliminary air quality modeling data that characterized interstate ozone transport projected to 2018. On April 8, 2015, the EPA held a workshop that continued a discussion with states on the path forward for addressing interstate transport for the 2008 8-hour ozone NAAQS. On August 4, 2015, we published a NODA with updated modeling that states could use to support development of transport SIPs.

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include controls on EGU emissions that achieve ozone season NO_X emission reductions and/or that establish EGU NO_X ozone emissions budgets approximately equivalent to those identified in this proposal as achievable by 2017. (This is discussed in more detail in Section VII.) In these SIPS, states could also demonstrate that they are achieving the same level of emissions reductions through non-EGU source measures as they would achieve under the EGU budgets established in the FIP. For example, a SIP could set EGU budgets, but allow emission reductions from non-EGU sources as a compliance option. EPA also seeks comment on methods it can use to ensure that any non-EGU reductions are incremental to the base case, permanent, and enforceable.

b. Potential for Full Remedy under SIPs

The EPA also notes that many states have already submitted, or are currently developing, SIP submittals to address the good neighbor provision of the CAA for the 2008 ozone standard, and expects that some may assert that the state plan fully addresses the state's good neighbor obligation.

The EPA anticipates that those SIPs intending to fully address the state's good neighbor obligations and for which the state is seeking approval may fall into one of two categories: (1) The SIP concludes that the state is meeting its good neighbor obligation without need for additional NO_X reductions.

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This SIP could include an adequate demonstration, using EPA or state-generated analytical results, which supports the state's conclusion that the state contributes insignificant amounts to downwind nonattainment or maintenance problems in other states. The EPA would generally expect to propose full approval of these SIPs.

(2) The SIP demonstrates that the state will timely achieve reductions that fully address its significant contribution to nonattainment or interference with maintenance in downwind states. This demonstration could include an assessment of how all emissions source sectors contribute to the state's contribution and how these sectors are controlled in that state. States wishing to seek full approval of good neighbor SIPs should contact their appropriate regional office. Guidance on developing such SIPs is outside the scope of this action, but the EPA intends to work closely with any state that is interested in pursuing this option.

3. Why We Focus on Eastern States

CSAPR and previous federal transport rules, such as the NO_X SIP Call and CAIR, were designed to address collective contributions of ozone pollution from states in the eastern U.S. These rules did not address contributions in the 11

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western contiguous United States.[37] The EPA's air quality modeling that supports this proposed rule includes data for the western states. This assessment shows that there are problem receptors in the West to which western states contribute amounts greater than or equal to the screening threshold used to evaluate transport across eastern states (i.e., 1 percent of the NAAQS). However, there may be additional criteria to evaluate regarding transported air pollution in the West when evaluating upwind states' contributions to downwind air quality impacts, such as those discussed in EPA-state meetings to discuss approaches for determining how emissions in upwind states impact air quality in downwind states.[38] Given that the near-term 2017 implementation timeframe constrains the opportunity to conduct a further evaluation of western states, the EPA proposes to focus this rulemaking on eastern states. This focus would not relieve western states of obligations to address interstate transport under the Act. The EPA and states working together would continue to evaluate interstate transport in the western states on a case-by-case basis. The

[37] For the purpose of this action, the western U.S. (or the West) consists of the 11 western contiguous states of Arizona, California, Colorado, Idaho, Montana, New Mexico, Nevada, Oregon, Utah, Washington, and Wyoming, and the eastern U.S. (or East) consists of the remaining states in the contiguous U.S.

[38] For example, EPA-State meetings held in Research Triangle Park, NC on April 8, 2013 and Denver, Colorado on April 17, 2013.

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EPA would also continue to engage with western states on air quality modeling analyses and the implications of those analyses for interstate transport.

While the EPA proposes to focus this rulemaking on eastern states, we seek comment on whether to include western states in this rule. The EPA notes that analyses developed to support this proposal, including air quality modeling and the EPA's assessment of EGU NO_X mitigation potential, contain data that could be useful for states in developing SIPs or could be used to develop FIPs, where necessary.

The EPA seeks comment on the data provided for western states, including emissions inventories, ozone concentration modeling, contribution modeling, and EPA's assessment of EGU NO_X reduction potential.[39] These data are available in the docket for this proposal. The EPA also solicits comment on whether to promulgate FIPs to address interstate ozone transport for the 2008 ozone NAAQS for western states, either in this rulemaking or in a subsequent rulemaking.

4. Short-Term NO_X Emissions

[39] On August 4, 2015, the EPA published a Notice of Data Availability (80 FR 46271) requesting comment on the air quality modeling platform and air quality modeling results that are being used for this proposed rule. Specifically, in the NODA, the EPA requested comment on the data and methodologies related to the 2011 and 2017 emissions and the air quality modeling to project 2017 concentrations and contributions. Comments received on that data via the NODA will be considered for the final rule.

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In eastern states, the highest measured ozone days tend to occur within the hottest days, weeks, or months of the summer. On many high ozone days, there is higher demand for electricity (for instance, to run air conditioners). In general and technical discussions with representatives and officials of eastern states in April 2013 and April 2015, and in several letters to the EPA, officials from the Ozone Transport Region (OTR)[40] states suggested that EGU emissions transported from upwind states may disproportionally affect downwind ozone concentrations on peak ozone days in the eastern U.S. These representatives asked that the EPA consider additional "peak day" limits on EGU NO_X emissions.

Some states have also asked the EPA to consider whether existing emission controls are being turned off for short periods (e.g., multiple days) within the ozone season, for example during hot weeks. These states assert that emissions from short-term idling of controls may contribute to downwind ozone NAAQS exceedances in the eastern U.S. These states suggest that sub-seasonal limits on EGU NO_X emissions would reduce ozone

[40] The OTR was established by the CAA amendments of 1990 to facilitate addressing the ozone problem on a regional basis and consists of the following states: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, the District of Columbia and northern Virginia. 42 U.S.C. 7511c, CAA section 184.

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formation that might be attributable to short-term idling of NO_X controls.

The EPA seeks comment on whether or not short-term (e.g., peak-day) EGU NO_X emissions disproportionately impact downwind ozone concentrations, and if they do, then what EGU emission limits (e.g., daily or monthly emission rates or differential allowance surrender ratios on high ozone days) would be reasonable complements to the proposed seasonal CSAPR requirement to mitigate this impact.

C. Responding to the Remand of CSAPR NO_X Ozone-Season Emissions Budgets

As noted above, in *EME Homer City II*, the D.C. Circuit declared invalid the CSAPR phase 2 NOx ozone-season emissions budgets of 11 states, holding that those budgets over-control with respect to the downwind air quality problems to which those states were linked for the 1997 ozone NAAQS. 795 F.3d at 129-30, 138. As to ten of these states, the court held that EPA's 2014 modeling conducted to support the RIA for CSAPR demonstrated that air quality problems at the downwind locations to which those states were linked would resolve by phase 2 of the CSAPR program without further transport regulation (either CAIR or CSAPR). *Id.* at 129-30. With respect to Texas, the court held that the record reflected that the ozone air quality problems to

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which the state was linked could be resolved at a lower cost threshold. *Id.* The court therefore remanded those budgets to EPA for reconsideration consistent with the court's opinion. *Id.* at 138. The court instructed the EPA to act "promptly" in addressing these issues on remand. *Id.* at 132.

The court's decision explicitly applies to 11 state budgets involved in that litigation: Florida, Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Texas, Virginia, and West Virginia. *Id.* at 129-30, 138. EPA is proposing in this rule to promulgate FIPs for nine of those states to address interstate transport with respect to the 2008 ozone NAAQS: Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Texas, Virginia, and West Virginia. The proposed FIPs incorporate revised emissions budgets that would supplant and replace the budgets promulgated in the CSAPR rule to address the 1997 ozone NAAQS, the same budgets remanded by the D.C. Circuit for reconsideration. Further, as proposed in this rule, these proposed budgets would be effective for the 2017 ozone season, the same period in which the phase 2 budgets that were invalidated by the court are currently scheduled to become effective. Therefore, this proposed action provides an appropriate and timely response to the court's remand by replacing the budgets promulgated in the CSAPR to address the

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1997 ozone NAAQS, which were declared invalid by the D.C. Circuit, with budgets developed to address the revised and more stringent 2008 ozone NAAQS.[41]

The EPA notes that it is able to propose addressing the D.C. Circuit's remand of CSAPR NO_X ozone-season emissions budgets because the agency was already performing analysis and policy development for this proposal, which is directly applicable to this aspect of the D.C. Circuit opinion.

Separately, various petitioners filed legal challenges in the D.C. Circuit to a supplemental rule that added five states to the CSAPR ozone-season trading program, 76 FR 80760 (Dec. 27, 2011). *See Public Service Company of Oklahoma v. EPA*, No. 12-1023 (D.C. Cir., filed Jan. 13, 2012). The case was held in abeyance during the pendency of the litigation in *EME Homer City*. The case remains pending in the D.C. Circuit as of the date of signature of this rule.[42] The EPA notes that this rule

[41] The methodology for developing the proposed budgets to address the 2008 ozone NAAQS is described in more detail in Sections VI and VII below. Section VI also includes an evaluation, as instructed by the court in *EME Homer City II*, to affirm that the proposed budgets do not over-control with respect to downwind air quality problems identified in this rule. 795 F.3d at 127-28.

[42] In 2012, the EPA also finalized two rules making certain revisions to CSAPR. 77 FR 10324 (Feb. 21, 2012); 77 FR 34830 (June 12, 2012). Various petitioners filed legal challenges to these rules in the D.C. Circuit, and the cases were also held in abeyance pending the litigation in *EME Homer City*. *See Wisconsin Public Service Corp. v. EPA*, No. 12-1163 (D.C. Cir., filed Apr. 6, 2012); *Utility Air Regulatory Group v. EPA*, No. 12-1346 (D.C. Cir., filed Aug. 9, 2012). The cases currently remain pending in the D.C. Circuit.

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also proposes to promulgate FIPs for all five states added to CSAPR in the supplemental rule: Iowa, Michigan, Missouri, Oklahoma, and Wisconsin. The proposed FIPs incorporate revised emissions budgets that would supplant and replace the budgets promulgated in the supplemental CSAPR rule to address the 1997 ozone NAAQS for these five states and would be effective for the 2017 ozone season.

For the two remaining ozone-season states affected by this portion of the *EME Homer City II* decision, Florida and South Carolina, the EPA is not proposing in this action to promulgate FIPs because the air quality modeling performed to support the proposal does not indicate that these states are linked to any identified downwind nonattainment or maintenance receptors with respect to the 2008 ozone standard. Inherently then, because the 2008 ozone NAAQS is more stringent than the 1997 ozone NAAQS, this modeling also does not indicate that Florida or South Carolina are linked to any remaining air quality concerns with respect to the 1997 ozone standard for which the states were regulated in CSAPR.

Accordingly, in order to address the Court's remand with respect to these two states' interstate transport responsibility under the 1997 ozone standard, the EPA proposes to remove these states from the CSAPR ozone-season trading program beginning in

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2017 when the phase 2 ozone-season emissions budgets were scheduled to be implemented.

The EPA notes that because the proposed rule modeling was performed prior to the D.C. Circuit's issuance of *EME Homer City II*, that modeling assumed in its baseline for all states the emission reductions associated with the CSAPR phase 2 ozone-season budgets. In the final rule modeling, the EPA will make any additional changes to the emissions inventories or modeling platform as may be justified based on comments received on the modeling performed for the proposed rule. In the event that air quality modeling conducted for the final rule demonstrates that either Florida or South Carolina are projected to significantly (e.g., greater than or equal to 1% of the NAAQS) contribute to an air quality problem with respect to the 2008 ozone standard in the absence of a CSAPR-related emissions budget in place for those states, the EPA instead proposes to finalize revised budgets (presented with this rulemaking for comment) for whichever of those states may be identified as linked to such air quality problems rather than remove those states from the CSAPR ozone-season trading program. The EPA has calculated emissions budgets for Florida and South Carolina that we are proposing to apply to those states if, and only if, the final rule air quality modeling identifies a linkage as just

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described. These proposed budgets are developed using the same methods applied to the 23 states that the EPA proposed to regulate in this action. These methods are described in section VI of this proposal and the methods and resulting emissions budgets are provided in the Ozone Transport Policy Analysis TSD.

The EPA seeks comment on this approach with respect to addressing the remand as to Florida and South Carolina, including the proposed budgets that would apply to those states if a linkage is identified, which are available in the docket.

Additionally, the EPA notes Florida and South Carolina may be relying upon emissions reductions that result from now-remanded emissions budgets in Florida and South Carolina to satisfy statutory obligations other than the interstate transport requirements. However, Florida and South Carolina may have an interest in submitting SIPs to continue their participation in the CSAPR NO_X ozone-season trading program in order to meet other Clean Air Act requirements. Likewise, to the extent that the final modeling indicates that other states included in the remand of the CSAPR phase 2 NO_X ozone-season emissions budgets are not linked to any identified downwind nonattainment or maintenance receptors with respect to the 2008 ozone standard, they would not be included in the final FIPs but they may be interested in continuing to participate in the CSAPR

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NO_X ozone-season trading program in order to meet other Clean Air Act requirements. The EPA seeks comment on whether to allow Florida, South Carolina, and other similarly situated states (if any) to continue their participation in the CSAPR NO_X ozone-season program through voluntary SIPs that would retain the CSAPR NO_X ozone-season emissions budgets, contingent upon review and approval by the EPA.

The D.C. Circuit also remanded without vacatur the CSAPR SO_2 annual emissions budgets for four states (Alabama, Georgia, South Carolina, and Texas) for reconsideration. 795 F.3d at 129, 138. This proposal does not address the remand of these CSAPR phase 2 SO_2 annual emissions budgets. The EPA intends to address the remand of the phase 2 SO_2 annual emissions budgets separately. The existing CSAPR annual emissions budgets and implementation programs (CSAPR SO_2 annual and NO_X annual requirements), which address interstate transport for the 1997 and 2006 $PM_{2.5}$ NAAQS, continue to apply at this time.

D. Addressing Outstanding Transport Obligations for the 1997 Ozone NAAQS

In the original CSAPR, the EPA noted that the reductions for 11 states may not be sufficient to fully eliminate all significant contribution to nonattainment or interference with maintenance for certain downwind areas with respect to the 1997

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ozone NAAQS.[43] The 11 states are: Alabama, Arkansas, Georgia, Illinois, Indiana, Kentucky, Louisiana, Mississippi, Missouri, Tennessee, and Texas.[44] In the original CSAPR, the EPA's analysis projected continued nonattainment and maintenance problems at downwind receptors to which these upwind states were linked after implementation of the CSAPR trading programs. Specifically, the persistent ozone problems were expected in Baton Rouge, Louisiana; Houston, Texas; and Allegan, Michigan according to the remedy case modeling conducted for the final rule. At that time the EPA did not address whether additional ozone season NO_X emission reductions would be needed in these states to fully resolve the good neighbor obligation under the CAA with respect to the 1997 ozone NAAQS beyond the EGU requirements promulgated in CSAPR.

To evaluate whether additional emission reductions would be needed in these 11 states to address the states' full good neighbor obligation for the 1997 ozone NAAQS, the EPA reviewed

[43] See CSAPR Final Rule, 76 FR at 48220, and the CSAPR Supplemental Rule, 76 FR at 80760, December 27, 2011.

[44] The EPA acknowledges that, despite its conclusion in CSAPR that the air quality problems to which Texas was linked in the original CSAPR were not fully resolved, the court concluded in *EME Homer City II* that the NOx ozone-season emissions budget finalized for Texas resulted in over-control as to the ozone air quality problems to which the state was linked. 795 F.3d at 129-30. As discussed below in section V, this rule proposes to respond to the remand of Texas's NOx ozone-season emissions budget by promulgating a new budget to address the 2008 ozone NAAQS. The EPA has also evaluated Texas's contribution to any remaining air quality problems with respect to the 1997 ozone NAAQS. [Text may be revised to reflect ongoing litigation.]

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the 2017 baseline air quality modeling conducted for this proposal, which includes emission reductions associated with the CSAPR phase 2 ozone-season budgets.

The updated 2017 air quality modeling shows that the predicted average DVs and maximum DVs for 2017 are below the level of the 1997 ozone NAAQS for the downwind receptors of concern that the 11 states were linked to in the original CSAPR for the 1997 ozone NAAQS. Further, the 2017 air quality modeling shows that there are no other nonattainment or maintenance receptors to which these areas would be linked with respect to the 1997 ozone NAAQS. This conclusion demonstrates that no further emission reductions are required to address the interstate transport obligations of these states with respect to the 1997 ozone NAAQS, and therefore EPA finds that the original CSAPR emissions budgets satisfy these states' full obligation to address interstate ozone transport under the good neighbor provision of the CAA as to that NAAQS. Therefore, we propose to find that the original CSAPR FIPs fully satisfy those 11 states' good neighbor CAA obligations regarding the emissions that contribute significantly to nonattainment or interfere with maintenance of the 1997 ozone NAAQS in other states.

IV. Legal Authority

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A. EPA's Authority for the Proposed Rule

1. Statutory Authority

The statutory authority for this proposed action is provided by the CAA as amended (42 U.S.C. 7401 *et seq.*). Specifically, sections 110 and 301 of the CAA provide the primary statutory bases for this proposal. The most relevant portions of section 110 are subsections 110(a)(1), 110(a)(2), and 110(a)(2)(D)(i)(I), and 110(c)(1).

Section 110(a)(1) provides that states must make SIP submissions "within 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a national primary ambient air quality standard (or any revision thereof)," and that these SIP submissions are to provide for the "implementation, maintenance, and enforcement" of such NAAQS.[45] The statute directly imposes on states the duty to make these SIP submissions, and the requirement to make the submissions is not conditioned upon the EPA taking any action other than promulgating a new or revised NAAQS.[46]

The EPA has historically referred to SIP submissions made for the purpose of satisfying the applicable requirements of CAA sections 110(a)(1) and 110(a)(2) as "infrastructure SIP"

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[45] 42 U.S.C. 7410(a) (1).

[46] *See EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584, 1601 (2014).

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submissions. Section 110(a)(1) addresses the timing and general requirements for infrastructure SIP submissions, and section 110(a)(2) provides more details concerning the required content of these submissions. It includes a list of specific elements that "[e]ach such plan" submission must address.[47] All states, regardless of whether the state includes areas designated as nonattainment for the relevant NAAQS, must have SIPs that meet the applicable requirements of section 110(a)(2), including provisions of section 110(a)(2)(D)(i)(I) described further below and which are the focus of this proposal.

Section 110(c)(1) requires the Administrator to promulgate a FIP at any time within 2 years after the Administrator: 1) finds that a state has failed to make a required SIP submission, 2) finds a SIP submission to be incomplete pursuant to CAA section 110(k)(1)(C), or 3) disapproves a SIP submission, unless the state corrects the deficiency through a SIP revision that the Administrator approves before the FIP is promulgated.[48]

Section 110(a)(2)(D)(i)(I), also known as the "good neighbor provision," provides the basis for this proposed action. It

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[47] EPA's general approach to infrastructure SIP submissions is explained in greater detail in individual notices acting or proposing to act on state infrastructure SIP submissions and in guidance. *See, e.g.*, Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Sections 110(a)(1) and 110(a)(2) (Sept. 2013).

[48] 42 U.S.C. 7410(c) (1).

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requires that each state SIP shall include provisions sufficient to "prohibit[] . . . any source or other type of emissions activity within the State from emitting any air pollutants in amounts which will — (I) contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any [NAAQS]."[49]

The EPA has previously issued three rules interpreting and clarifying the requirements of section 110(a)(2)(D)(i)(I) for states in the eastern half of the United States. These rules, and the associated court decisions addressing these rules, provide important guidance regarding the requirements of section 110(a)(2)(D)(i)(I).

The NO_X SIP Call, promulgated in 1998, addressed the good neighbor provision for the 1979 1-hour ozone NAAQS and the 1997 8-hour ozone NAAQS.[50] The rule required 22 states and the District of Columbia to amend their SIPs and limit NO_X emissions that contribute to ozone nonattainment. The EPA set a NO_X ozone-season budget for each affected state, essentially a cap on ozone season NO_X emissions in the state. Sources in the affected states were given the option to participate in a regional cap-and-trade program, known as the NO_X Budget Trading Program (NBP).

[49] 42 U.S.C. 7410(a)(2)(D)(i)(I).
[50] 63 FR 57356 (Oct. 27, 1998).

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This rule was largely upheld by the D.C. Circuit in *Michigan v. EPA*, 213 F.3d 663 (D.C. Cir. 2000), *cert. denied*, 532 U.S. 904 (2001).

The Clean Air Interstate Rule (CAIR), promulgated in 2005, addressed both the 1997 $PM_{2.5}$ and ozone standards under the good neighbor provision.[51] CAIR required SIP revisions in 28 states and the District of Columbia to ensure that certain emissions of sulfur dioxide (SO_2) and/or NO_X — important precursors of regionally transported $PM_{2.5}$ (SO_2 and NO_X) and ozone (NO_X) – were prohibited. Like the NO_X SIP Call, states were given the option to participate in a regional cap-and-trade program to satisfy their SIP obligations. When the EPA promulgated the final CAIR in May 2005, the EPA also issued a national rule finding that states had failed to submit SIPs to address the requirements of CAA section 110(a)(2)(D)(i) with respect to the 1997 ozone and $PM_{2.5}$ NAAQS, given that states were required by the CAA to have submitted section 110(a)(2)(D)(i)(I) SIPs for those standards by July 2000.[52] This finding of failure to submit triggered a 2-year clock for the EPA to issue FIPs to address interstate transport, and on March 15, 2006, the EPA promulgated FIPs to ensure that the emission reductions required by CAIR would be achieved on

[51] 70 FR 25162 (May 12, 2005).
[52] 70 FR 21147 (April 25, 2005).

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schedule.[53] CAIR was remanded to EPA by the D.C. Circuit in *North Carolina*, 531 F.3d 896 (D.C. Cir. 2008), *modified on reh'g*, 550 F.3d 1176. For more information on the legal considerations of CAIR and the D.C. Circuit holding in *North Carolina*, refer to the preamble of the final CSAPR rule.[54]

In 2011, the EPA promulgated CSAPR to address the issues raised by the remand of CAIR and additionally to address the good neighbor provision for the 2006 $PM_{2.5}$ NAAQS.[55] CSAPR requires 28 states to reduce SO_2 emissions, annual NO_X emissions, and/or ozone season NO_X emissions that significantly contribute to other states' nonattainment or interfere with other states' abilities to maintain these air quality standards. To accomplish implementation aligned with the applicable attainment deadlines, the EPA promulgated FIPs for each of the 28 states covered by CSAPR. The FIPs implement regional cap-and-trade programs to achieve the necessary reductions. States can submit good neighbor SIPs at any time that, if approved by the EPA, would replace the CSAPR FIP for that state. As discussed below, CSAPR was the subject of decisions by both the D.C. Circuit and the Supreme Court, which largely upheld the rule.

[53] 71 FR 25328 (April 28, 2006).
[54] 76 FR 48208, 48217 (Aug. 8, 2011).
[55] 76 FR 48208.

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On August 21, 2012, the D.C. Circuit issued a decision in *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7 (D.C. Cir. 2012), vacating CSAPR and holding, among other things, that states had no obligation to submit good neighbor SIPs until the EPA had first quantified each state's good neighbor obligation.[56] The implication of this decision was that the EPA did not have authority to promulgate FIPs as a result of states' failure to submit or EPA's disapproval of such SIPs. The EPA sought review, first with the D.C. Circuit *en banc* and then with the Supreme Court. While the D.C. Circuit declined to consider the EPA's appeal *en banc*,[57] on January 23, 2013, the Supreme Court granted the EPA's petition for certiorari.[58]

On April 29, 2014, the Supreme Court issued a decision reversing the D.C. Circuit's *EME Homer City* opinion on CSAPR and held, among other things, that under the plain language of the CAA, states must submit SIPs addressing the good neighbor provision within 3 years of promulgation of a new or revised NAAQS, regardless of whether the EPA first provides guidance, technical data or rulemaking to quantify the state's

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[56] *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7, 31 (D.C. Cir. 2012).
[57] *EME Homer City Generation, L.P. v. EPA*, No. 11-1302 (D.C. Cir. January 24, 2013), ECF No. 1417012 (denying the EPA's motion for rehearing en banc).
[58] *EPA v. EME Homer City Generation, L.P.*, 133 S. Ct. 2857 (2013) (granting the EPA's and other parties' petitions for certiorari).

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obligation.[59] Thus, the Supreme Court affirmed that states have an obligation in the first instance to address the good neighbor provision after promulgation of a new or revised NAAQS, a holding that also applies to states' obligation to address interstate transport for the 2008 ozone NAAQS. The Supreme Court remanded the litigation to the D.C. Circuit for further proceedings.

Finally, on July 28, 2015, the D.C. Circuit issued its opinion on CSAPR regarding the remaining legal issues raised by the Petitioners on remand from the Supreme Court, *EME Homer City II*, 795 F.3d 118. This decision largely upheld EPA's approach to addressing interstate transport in CSAPR, leaving the rule in place and affirming EPA's interpretation of various statutory provisions and EPA's technical decisions. The decision also remands the rule without vacatur for reconsideration of EPA's emissions budgets for certain states. In particular and as discussed in more detail in section III, the court declared invalid the CSAPR phase 2 NOx ozone-season emissions budgets of 11 states, holding that those budgets over-control with respect to the downwind air quality problems to which those states were linked for the 1997 ozone NAAQS. The court's decision explicitly

[59] *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584, 1600-01 (2014).

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applies to 11 states: Florida, Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Texas, Virginia, and West Virginia. *Id.* at 129-30, 138. The court also remanded without vacatur the SO_2 annual emissions budgets for four states (Alabama, Georgia, South Carolina, and Texas) for reconsideration. *Id.* at 129, 138. The court instructed the EPA to act "promptly" in addressing these issues on remand. *Id.* at 132.

Section 301(a)(1) of the CAA also gives the Administrator of the EPA general authority to prescribe such regulations as are necessary to carry out her functions under the Act.[60] Pursuant to this section, the EPA has authority to clarify the applicability of CAA requirements. In this action, among other things, the EPA is clarifying the applicability of section 110(a)(2)(D)(i)(I) by identifying NO_X emissions in certain states that must be prohibited pursuant to this section with respect to the 8-hour ozone NAAQS promulgated in 2008.

In particular, the EPA is proposing to use its authority under sections 110 and 301 to promulgate FIPs that establish or revise EGU NO_X ozone-season emissions budgets for 23 eastern states to mitigate their significant contribution to nonattainment or interference with maintenance in another state.

[60] 42 U.S.C. 7601(a)(1).

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As described in more detail later in this notice, generally the EPA is proposing to update each affected state's FIP, including revising the existing CSAPR budgets.[61] The EPA is also proposing to respond to the court's remand in *EME Homer City II* with respect to the remanded NO_X ozone-season emissions budgets.

2. FIP Authority for Each State Covered by the Proposed Rule.

a. *Status of State Good Neighbor SIPs for the 2008 Ozone NAAQS*

As discussed above, all states have an obligation to submit SIPs that address the requirements of CAA section 110(a)(2) within 3 years of promulgation of a new or revised NAAQS. With respect to the 2008 ozone NAAQS, states were required to submit SIPs addressing the good neighbor provision by March 12, 2011. If the EPA finds that a state has failed to submit a SIP to meet its statutory obligation to address section 110(a)(2)(D)(i)(I) or if EPA disapproves a good neighbor SIP, then the EPA has not only the authority but the obligation, pursuant to section 110(c)(1), to promulgate a FIP to address the CAA requirement within 2 years of the finding or disapproval.

[61] One state, Kansas, would have a new CSAPR ozone season requirement under this proposal. The remaining 22 states were included in the original CSAPR ozone-season program as to the 1997 ozone NAAQS.

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On July 13, 2015, the EPA published a rule finding that 24 states failed to make complete submissions that address the requirements of section 110(a)(2)(D)(i)(I) related to the interstate transport of pollution as to the 2008 ozone NAAQS. See 80 FR 39961 (July 13, 2015) (effective August 12, 2015). The finding action triggered a 2-year deadline for the EPA to issue FIPs to address the good neighbor provision for these states by August 12, 2017. The states included in this finding of failure to submit are: Alabama, Arkansas, California, Florida, Georgia, Iowa, Illinois, Kansas, Massachusetts, Maine, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Mexico, North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Vermont, Virginia, and West Virginia.

Since the EPA issued the findings notice, EPA has received a SIP submission addressing the good neighbor provision for the 2008 ozone NAAQS from the state of Maine on which the EPA has not yet proposed action.

Several additional states – Connecticut, Nebraska, North Dakota, Rhode Island, South Dakota, New York, Delaware, Maryland, Indiana, Kentucky, Louisiana, New Jersey, Ohio, Texas, Wisconsin, and the District of Columbia – have previously submitted SIPs to address the requirements of section 110(a)(2)(D)(i)(I) for the 2008 ozone NAAQS. To the extent that

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the EPA has not finalized action on these submitted SIPs, these states can evaluate their submissions in light of this proposal and the actions we are taking to reduce interstate ozone transport for the 2008 ozone NAAQS. Pursuant to a judgment issued on May 15, 2015, the EPA is required to take final action on the interstate transport SIPs for Nebraska and North Dakota by January 29, 2016, and for Maryland, Texas, Ohio and Indiana by June 7, 2016.[62] In the event that the EPA finalizes disapproval or partial disapproval of any of these SIPs, that action would trigger the EPA's FIP authority to implement the requirements of the good neighbor provision for those states. Alternatively, if any of these states withdraws its 2008 ozone interstate transport SIP submittal, the EPA plans to issue a separate notice of finding of failure to submit for these states and will finalize FIPs as appropriate.

On March 7, 2013, the EPA finalized action on the State of Kentucky's SIP submission addressing, among other things, the good neighbor provision requirements for the 2008 ozone NAAQS.[63] The EPA disapproved the submission as to the good neighbor requirements. In the notice, the EPA explained that the disapproval of the good neighbor portion of the state's

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[62] *See* Judgment, *Sierra Club* v. *McCarthy,* Case 4:14-cv-05091-YGR (N.D. Cal. May 15, 2015).
[63] 78 FR 14681 (March 7, 2013).

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infrastructure SIP submission did not trigger a mandatory duty for the EPA to promulgate a FIP to address these requirements.[64] Citing the D.C. Circuit's decision *EME Homer City Generation v. EPA*, 696 F.3d 7 (2012), the EPA explained that the court concluded states have no obligation to make a SIP submission to address the good neighbor provision for a new or revised NAAQS until the EPA first defines a state's obligations pursuant to that section.[65] Therefore, because a good neighbor SIP addressing the 2008 ozone standard was not at that time required, the EPA indicated that its disapproval action would not trigger an obligation for the EPA to promulgate a FIP to address the interstate transport requirements.[66]

On April 30, 2013, the Sierra Club filed a petition for review of the EPA's action based on the Agency's conclusion that the FIP clock was not triggered by the disapproval of Kentucky's good neighbor SIP.[67] As described above, on April 29, 2014, the Supreme Court issued a decision reversing and vacating the D.C. Circuit's decision in *EME Homer City*. Following the Supreme Court decision, the EPA requested, and the court granted, vacatur and remand of the portion of the EPA's final action that

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[64] *Id.* at 14683.
[65] *Id.*
[66] *Id.*
[67] *Sierra Club v. EPA*, Case No. 13-3546 (6th Cir., filed Apr. 30, 2013).

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determined that the FIP obligation was not triggered by the disapproval.[68]

In this notice, the EPA is proposing to correct the portion of the disapproval notice indicating that the FIP clock would not be triggered by the SIP disapproval. The EPA believes that the EPA's obligation to develop a FIP was triggered on the date of the judgment issued by the Supreme Court in *EPA v. EME Homer City*, June 2, 2014, and the EPA is obligated to issue a FIP at any time within two years of that date. The EPA does not believe that the FIP obligation was triggered as of the date of the SIP disapproval because the controlling law as of that date was the D.C. Circuit decision in *EME Homer City*, which held that states had no obligation to submit a SIP and the EPA had no authority to issue a FIP until the EPA first quantified each state's emission reduction obligation under the good neighbor provision. Accordingly, the most reasonable conclusion is that the EPA's FIP obligation was triggered when the Supreme Court clarified the state and federal obligations with respect to the good neighbor provision. Thus, the EPA proposes to find that the FIP obligation was triggered as of June 2, 2014, and that the EPA is

[68] Order, *Sierra Club v. EPA*, Case No. 13-3546, Document No. 74-1 (Mar. 13, 2015).

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obligated to promulgate a FIP that corrects the deficiency by June 2, 2016.

b. *States Submitting Transport SIPs before FIP Is Finalized*

The EPA recognizes that some states are currently developing SIP submissions or revising their submitted SIPs to address the good neighbor provision of the CAA for the 2008 ozone standard. The EPA encourages SIP development and will continue to assist states in developing transport SIPs. As noted above, the EPA is subject to a court order requiring final action on certain state SIPs by January 29, and June 7, 2016.

The fact that the EPA is proposing a FIP for any state does not suggest that the EPA has determined that the state's submittal is not approvable. If EPA finalizes approval of a state's good neighbor SIP before the FIP is applied, the FIP that is now being proposed for that state would no longer be necessary.

Further, the EPA notes that the remedy being proposed in this notice are not the only means a state has to mitigate interstate ozone transport under the good neighbor provision. States could submit measures that strengthen their current SIPs and achieve reductions that are similar to, or more efficacious in eliminating significant transport than, those that would be achieved by the FIPs proposed in this action. The EPA strongly

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encourages such strengthening actions. If a state submits a SIP that is approved (in whole or in part) by the EPA via notice-and-comment rulemaking and that achieves ozone season NO_X emission reductions and/or establishes EGU NO_X ozone emissions budgets approximately equivalent to those identified by EPA as achievable by 2017, the EPA does not anticipate subjecting the state to the EPA's partial remedy in this FIP action.

V. Analyzing Downwind Air Quality and Upwind-State Contributions

In this section, we describe the air quality modeling performed to (1) identify locations where we expect there to be nonattainment or maintenance problems for 8-hour ozone for the 2017 analytic year chosen for this proposal, and (2) quantify the contributions from anthropogenic emissions from upwind states to downwind ozone concentrations at monitoring sites projected to be in nonattainment or have maintenance problems in 2017 for the 2008 ozone NAAQS. Air quality modeling to assess the health and welfare benefits of the emissions reductions expected to result from this proposal is described in section VIII.

This section includes information on the air quality modeling platform used in support of the proposed rule with a focus on the base year and future base case emission

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inventories. We also provide the projection of 2017 ozone concentrations and the interstate contributions for 8-hour ozone. The Air Quality Modeling Technical Support Document (AQM TSD) in the docket for this proposed rule contains more detailed information on the air quality modeling aspects of this rule.

On August 4, 2015, the EPA published a Notice of Data Availability (80 FR 46271) requesting comment on the air quality modeling platform and air quality modeling results that are being used for this proposed rule. Specifically, in the NODA, the EPA requested comment on the data and methodologies related to the 2011 and 2017 emissions and the air quality modeling to project 2017 concentrations and contributions. Comments received on that data via the NODA will be considered for the final rule.

A. Overview of Air Quality Modeling Platform

The EPA performed air quality modeling for three emissions scenarios: a 2011 base year, a 2017 baseline, and a 2017 illustrative control case that reflects the emission reductions expected from the proposed rule.[69] We selected 2011 as the base year to reflect the most recent National Emissions Inventory (NEI). In addition, the meteorological conditions during the

[69] The 2017 illustrative control case is relevant to the EPA's policy analysis discussed in section VI and to the benefits and costs assessment discussed in section VIII of this preamble. It is not used to identify nonattainment or maintenance receptors or quantify the contributions from upwind states to these receptors.

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summer of 2011 were generally conducive for ozone formation across much of the U.S., particularly the eastern U.S. For example, as described in the AQM TSD, an analysis of meteorological-adjusted trends in seasonal mean ozone for the period 2000 through 2012 indicates that, on a regional basis, the summer of 2011 was typical, in terms of the presence of conditions conducive to ozone formation, of high ozone years in the eastern U.S. Additional analyses of meteorological conditions during the summer of 2011 in comparison to conditions during several other recent years can be found in the AQM TSD. The use of meteorological data representing conditions that are conducive for ozone formation is consistent with the EPA's modeling guidance for attainment demonstrations.[70] As noted above, we selected 2017 as the projected analysis year to coincide with the attainment date for moderate areas under the 2008 ozone NAAQS. We used the 2017 baseline emissions in our air quality modeling to identify future nonattainment and maintenance locations and to quantify the contributions of emissions from upwind states to 8-hour ozone concentrations at downwind locations. We used the air quality modeling of the 2017

[70] "Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM2.5, and Regional Haze" U.S. Environmental Protection Agency, Research Triangle Park, NC. December 2014. http://www.epa.gov/ttn/scram/guidance/guide/Draft_O3-PM-RH_Modeling_Guidance-2014.pdf.

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baseline and 2017 illustrative control case emissions to estimate the air quality impacts and health benefits of this proposal.

The EPA used the Comprehensive Air Quality Model with Extensions (CAMx) version 6.11[71] to simulate pollutant concentrations for the 2011 base year and the 2017 future year scenarios. CAMx is a grid cell-based, multi-pollutant photochemical model that simulates the formation and fate of ozone and fine particles in the atmosphere. The CAMx model contains certain probing tools including source apportionment techniques that are designed to quantify the contribution of emissions from various sources and areas to ozone in other downwind locations. The CAMx model applications were performed for a modeling region (i.e., modeling domain) that covers the contiguous 48 states, the District of Columbia, and adjacent portions of Canada and Mexico using a horizontal resolution of 12 x 12 km. A map of the air quality modeling domain is provided in the AQM TSD.

The 2011-based air quality modeling platform includes 2011 base year emissions and future year projections of these emissions and 2011 meteorology for air quality modeling with

[71] Comprehensive Air Quality Model with Extensions Version 6.11 User's Guide. Environ International Corporation. Novato, CA. December, 2014.

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CAMx. In the remainder of this section, we provide an overview of (1) the 2011 and 2017 emissions inventories, (2) the methods for projecting future nonattainment and maintenance along with a list of 2017 baseline nonattainment and maintenance receptors in the eastern U.S., (3) the approach to developing metrics to measure interstate contributions to 8-hour ozone, and (4) the predicted interstate contributions to downwind nonattainment and maintenance in the eastern U.S. We also identify which predicted interstate contributions are at or above the CSAPR screening threshold, which we are proposing to apply for regulation of interstate transport of ozone for purposes of the 2008 ozone standard.

B. Emission Inventories

The EPA developed emission inventories for this proposal including emission estimates for EGUs, non-EGU point sources, stationary nonpoint sources, onroad mobile sources, nonroad mobile sources, wild fires, prescribed fires, and for biogenic emissions that are not the result of human activities. The EPA's air quality modeling relies on this comprehensive set of emission inventories because emissions from multiple source categories are needed to model ambient air quality and to

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facilitate comparison of model outputs with ambient measurements.

To prepare the emission inventories for air quality modeling, the EPA processed the emission inventories using the Sparse Matrix Operator Kernel Emissions (SMOKE) Modeling System version 3.6.5 to produce the gridded, hourly, speciated, model-ready emissions for input to the CAMx air quality model. Additional information on the development of the emission inventories and on data sets used during the emissions modeling process are provided in the TSD "Preparation of Emissions Inventories for the Version 6.2, 2011 Emissions Modeling Platform," hereafter known as the "Emissions Modeling TSD." This TSD is available in the docket for this rule and at http://www.epa.gov/ttn/chief/emch/index.html#2011.

The EPA published Federal Register notices on November 27, 2013 (78 FR 70935), and January 14, 2014 (79 FR 2437), to take comment on the 2011 and 2018[72] emission modeling platforms,

[72] During the 2013 and 2014 pre-proposal comment periods for the modeling platforms, the attainment deadline for the downwind areas was established by regulation as December 2018. The 2008 Ozone NAAQS SIP Requirements Rule revised the attainment deadline for ozone nonattainment areas currently designated as Moderate from December 2018 to July 2018, which means attainment determinations have to be based on design values calculated using 2015 through 2017 ozone season data. Therefore, in its July 2015 NODA and in this proposal, the EPA has adjusted the future year modeling to be for the year 2017 rather than 2018.

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including data and documentation on the methods used to prepare the emission inventories for air quality modeling. Comments were collected for the 2011 and 2018 emissions modeling platforms under the dockets EPA-HQ-OAR-2013-0743 and EPA-HQ-OAR-2013-0809, respectively. Comments from those notices that were accepted by the EPA have been incorporated into the emission modeling data and procedures for this proposal as documented in the Emissions Modeling TSD. As indicated above, the updated emission inventories, methodologies, and data were provided in a Notice of Data Availability published in the Federal Register on August 4, 2015 (80 FR 46271). Comments received on the proposal data will be considered for the final rule.

1. Foundation Emission Inventory Data Sets

The EPA developed emission data representing the year 2011 to support air quality modeling of a base year from which future air quality could be forecasted. The EPA used the 2011 National Emission Inventory (NEI) version 2 (2011NEIv2), released in March 2015, as the primary basis for the U.S. inventories supporting the 2011 air quality modeling. Documentation on the 2011NEIv2 is available in the 2011 National Emissions Inventory, version 2 TSD available in the docket for this rule and at http://www.epa.gov/ttn/chief/net/2011inventory.html#inventorydoc. The future base case scenario modeled for 2017 includes a

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representation of changes in activity data and of predicted emission reductions from on-the-books actions, including planned emission control installations and promulgated federal measures that affect anthropogenic emissions.[73]

2. Development of Emission Inventories for EGUs

Annual NO_X and SO_2 emissions for EGUs in the 2011NEIv2 are based primarily on data from continuous emission monitoring systems (CEMS), with other EGU pollutants estimated using emission factors and annual heat input data reported to the EPA. For EGUs without CEMS, the EPA used data submitted to the NEI by the states. For more information on the details of how the 2011 EGU emissions were developed and prepared for air quality modeling, see the Emissions Modeling TSD.

The EPA projected future 2017 baseline EGU emissions using version 5.14 of the Integrated Planning Model (IPM) (http://www.epa.gov/powersectormodeling). IPM, developed by ICF Consulting, is a state-of-the-art, peer-reviewed, multi-regional, dynamic, deterministic linear programming model of the contiguous U.S. electric power sector. It provides forecasts of least cost capacity expansion, electricity dispatch, and

[73] Biogenic emissions and emissions from wild fires and prescribed fires were held constant between 2011 and 2017 since (1) these emissions are tied to the 2011 meteorological conditions and (2) the focus of this rule is on the contribution from anthropogenic emissions to projected ozone nonattainment and maintenance.

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emission control strategies while meeting energy demand and environmental, transmission, dispatch, and reliability constraints. EPA has used IPM for over two decades to better understand power sector behavior under future business-as-usual conditions and to evaluate the economic and emission impacts of prospective environmental policies. The model is designed to reflect electricity markets as accurately as possible. The EPA uses the best available information from utilities, industry experts, gas and coal market experts, financial institutions, and government statistics as the basis for the detailed power sector modeling in IPM. The model documentation provides additional information on the assumptions discussed here as well as all other model assumptions and inputs.[74]

The IPM version 5.14 base case accounts for comments received as a result of the NODAs released in 2013 and 2014 (including control configuration) as well as updated environmental regulations. This projected base case accounts for the effects of the finalized MATS[75] and CSAPR rules, New Source

[74] Detailed information and documentation of EPA's Base Case, including all the underlying assumptions, data sources, and architecture parameters can be found on EPA's website at: www.epa.gov/airmarkets/powersectormodeling.

[75] In *Michigan v. EPA*, the Supreme Court reversed on narrow grounds a portion of the D.C. Circuit decision upholding the MATS rule, finding that EPA erred by not considering cost when determining that regulation of EGUs was "appropriate" pursuant to CAA section 112(n)(1). 135 S.Ct. 192 (2015). The case was remanded to the D.C. Circuit for further proceedings, and the MATS rule currently remains in place.

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Review settlements, and on-the-books state rules through 2014[76] impacting SO_2, NO_X, directly emitted particulate matter, and CO_2, and final actions the EPA has taken to implement the Regional Haze Rule. The EPA's IPM base case also includes two federal non-air rules affecting EGUs: the Cooling Water Intake Structure (Clean Water Act section 316(b)) rule and the Coal Combustion Residuals (CCR) rule. Documentation of IPM version 5.14 is in the docket and available online at www.epa.gov/powersectormodeling.

After the receptor and contribution analyses for this proposal were underway, the EPA released an updated IPM base case, version 5.15, and the final Clean Power Plan (CPP).[77] In order to reflect all on-the-books policies as well as the most current power sector modeling data, the EPA performed an assessment, described in section V-D below, to reflect inclusion of IPM 5.15 with the CPP in the base case for this proposal. The EPA will use this base case, including the final CPP, for its modeling analysis for the final rule. Additionally, EPA's analysis for the final rule may include updated assumptions about CSAPR phase 2 NO_X ozone-season or SO_2 annual emissions

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[76] For any specific version of IPM there is a cutoff date after which it is no longer possible to incorporate updates into the input databases. For version 5.14, that cutoff date was November 2014.

[77] [Placeholder for CPP reference once published]

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budgets for those states with budgets that were declared invalid and remanded to the EPA by the D.C. Circuit's decision in *EME Homer City II*.

In projecting future 2017 baseline EGU emissions, the EPA adjusted the 2018 IPM version 5.14 base case results to account for three categories of differences between 2017 and 2018. The categories are: 1) adjusting NO_X emissions for units with SCRs in 2018 but that are assumed not to operate or be installed in 2017; 2) adding NO_X emissions for units that are retiring in 2018 but are projected to operate in 2017; and 3) adjusting NO_X emissions for coal-fired units that are projected to convert to natural gas (i.e., "coal-to-gas") in 2018, but are still projected to burn coal in 2017. These adjustments were only made to the air quality flat file outputs of IPM and are discussed in greater detail in the IPM documentation found in the docket for this proposed rule.

3. Development of Emission Inventories for Non-EGU Point Sources

The 2011 non-EGU point sources in the 2011 base case inventory match those in the 2011NEIv2. Details on the development of the 2011 emission inventories can be found in the 2011NEIv2 TSD. Prior to air quality modeling, the emission inventories must be processed into a format that is appropriate

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for the air quality model to use. Details on the processing of the emissions for 2011 and on the development of the 2017 non-EGU emission inventories are available in the Emissions Modeling TSD. Projection factors and percent reductions in this proposal reflect comments received as a result of the NODAs in 2013 and 2014, along with emission reductions due to national and local rules, control programs, plant closures, consent decrees and settlements. Reductions from several Maximum Achievable Control Technology (MACT) and National Emission Standards for Hazardous Air Pollutants (NESHAP) standards are included. Projection approaches for corn ethanol and biodiesel plants, refineries and upstream impacts represent requirements pursuant to the Energy Independence and Security Act of 2007 (EISA).

For aircraft emissions at airports, the EPA developed projection factors based on activity growth projected by the Federal Aviation Administration Terminal Area Forecast (TAF) system, published in March 2013.

Point source and nonpoint oil and gas emissions are projected to 2018 using regional projection factors by product type using Annual Energy Outlook (AEO) 2014 projections to year 2017. NO_X and VOC reductions that are co-benefits to the NESHAP and New Source Performance Standards (NSPS) for Stationary Reciprocating Internal Combustion Engines (RICE) are reflected

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for select source categories. In addition, Natural Gas Turbines and Process Heaters NSPS NO_X controls and NSPS Oil and Gas VOC controls are reflected for select source categories.

4. Development of Emission Inventories for Onroad Mobile Sources

The EPA developed the onroad mobile source emissions for states other than California using the EPA's Motor Vehicle Emissions Simulator (MOVES) 2014. We computed the emissions within SMOKE by multiplying emission factors developed using MOVES with the appropriate activity data. We also used MOVES emission factors to estimate emissions from refueling. The 2011 onroad mobile source emissions used in the inventory for this rule are similar but not identical to the 2011NEIv2 emissions due to a more detailed treatment of E-85 emissions in the 2011 emission modeling platform used for this rule. Additional information on the approach for generating the onroad mobile source emissions is available in the Emissions Modeling TSD. Onroad mobile source emissions for California are consistent with the emissions submitted by the state as reflected in the 2011NEIv2.

In the future-year modeling for mobile sources, we included all national measures known at the time of modeling. The future scenarios for mobile sources reflect projected changes to fuel usage and onroad mobile control programs finalized as of the

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date of the model run. Finalized rules that are incorporated into the mobile source emissions include: Tier 3 Standards (March 2014), the Light-Duty Greenhouse Gas Rule (March 2013), Heavy (and Medium)-Duty Greenhouse Gas Rule (August 2011), the Renewable Fuel Standard (February 2010), the Light Duty Greenhouse Gas Rule (April 2010), the Corporate-Average Fuel Economy standards for 2008-2011 (April 2010), the 2007 Onroad Heavy-Duty Rule (February 2009), and the Final Mobile Source Air Toxics Rule (MSAT2) (February 2007). Impacts of rules that were in effect in 2011 are reflected in the 2011 base year emissions at a level that corresponds to the extent to which each rule had penetrated into the fleet and fuel supply by the year 2011. Local control programs such as the California LEV III program are included in the onroad mobile source emissions. Activity data for onroad mobile sources was projected using AEO 2014. Because EPA changed the model year from 2018 to 2017 between its pre-proposal modeling and the modeling conducted for this proposal (see footnote 64), and due to the substantial amount of lead time required to generate emission factors with MOVES, the EPA was unable to directly generate emission factors for 2017 prior to the modeling used to support this proposed rule. Therefore, for this proposal, future year onroad mobile source emissions were computed for 2018 and adjusted to 2017 levels

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using adjustment factors derived from national MOVES runs for 2017 and 2018. Emission factors will be generated directly for 2017 prior to air quality modeling for the final rule.

5. Development of Emission Inventories for Commercial Marine Category 3 (Vessel)

The commercial marine category 3 vessel ("C3 marine") emissions in the 2011 base case emission inventory for this rule are consistent with those in the 2011NEIv2. These emissions reflect reductions associated with the Emissions Control Area proposal to the International Maritime Organization control strategy (EPA-420-F-10-041, August 2010); reductions of NO_X, VOC, and CO emissions for new C3 engines that went into effect in 2011; and fuel sulfur limits that went into effect as early as 2010. The cumulative impacts of these rules through 2017 are incorporated in the 2017 projected emissions for C3 marine sources.

6. Development of Emission Inventories for Other Nonroad Mobile Sources

To develop the nonroad mobile source emission inventories other than C3 marine for the modeling platform, the EPA used monthly, county, and process level emissions output from the National Mobile Inventory Model (NMIM) (see http://www.epa.gov/otaq/nmim.htm). State-submitted emissions

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data for nonroad sources were used for Texas and California. These emissions are consistent with those in the 2011NEIv2.

The EPA also used NMIM to project nonroad mobile emissions for future years. Development of the future year nonroad emissions require a substantial amount of lead time and the emissions were prepared for the year 2018 before the model year was changed to 2017 when the attainment date was revised in the 2008 Ozone NAAQS SIP Requirements Rule. To develop a 2017 nonroad emissions inventory for this proposal that accounted for the difference between 2017 and 2018 emissions levels, we calculated the nonroad emissions for 2018, and then adjusted those emissions to 2017 levels using national adjustment factors derived from national NMIM runs for 2017 and 2018. Emissions specific to 2017 will be developed for the modeling that will support the final rule. The nonroad mobile emission control programs include reductions to locomotives, diesel engines and marine engines, along with standards for fuel sulfur content and evaporative emissions. A comprehensive list of control programs included for mobile sources is available in the Emissions Modeling TSD.

7. Development of Emission Inventories for Nonpoint Sources

The emissions for stationary nonpoint sources in our 2011 base case emission inventory are largely consistent with those

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in the 2011NEIv2. For more information on the nonpoint sources in the 2011 base case inventory, see the Emissions Modeling TSD and the 2011NEIv2 TSD.

Where states provided EPA with information about projected control measures or changes in nonpoint source emissions, the EPA incorporated those inputs in its projections. We included adjustments for state fuel sulfur content rules for fuel oil in the Northeast. Projected emissions for portable fuel containers reflect the impact of projection factors required by the final Mobile Source Air Toxics (MSAT2) rule and the EISA, including updates to cellulosic ethanol plants, ethanol transport working losses, and ethanol distribution vapor losses.

The EPA developed regional projection factors for nonpoint oil and gas sources by product type based on Annual Energy Outlook (AEO) 2014 projections to year 2018. We reflected criteria air pollutant (CAP) co-benefit reductions resulting from the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (RICE) and NSPS rules and Oil and Gas NSPS VOC controls for select source categories. Additional details on the projections are available in the Emissions Modeling TSD.

C. Air Quality Modeling to Identify Nonattainment and Maintenance Receptors

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In this section, we describe the air quality modeling performed to identify locations where we expect there to be nonattainment or maintenance problems for the 2008 8-hour ozone NAAQS in the 2017 analytic future year chosen for this proposal. We then describe how we factored current monitored data into the identification of sites as having either nonattainment or maintenance concerns for the purposes of this rulemaking. These sites are used as the "receptors" for quantifying the contributions of emissions in upwind states to nonattainment and maintenance concerns in downwind locations.

In this proposed rule, the EPA is relying on CSAPR's approach to identify separate nonattainment and maintenance receptors in order to give independent effect to both the "contribute significantly to nonattainment" and the "interfere with maintenance" prongs of section 110(a)(2)(D)(i)(I), consistent with the D.C. Circuit's direction in *North Carolina*.[78] In its decision on remand from the Supreme Court, the D.C. Circuit confirmed that EPA's approach to identifying maintenance receptors in CSAPR comported with the court's prior instruction to give independent meaning to the "interfere with maintenance"

[78] 531 F.3d at 910-911 (holding that the EPA must give "independent significance" to each prong of CAA section 110(a)(2)(D)(i)(I)).

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prong in the good neighbor provision. *EME Homer City II*, 795 F.3d at 136.

In CSAPR, the EPA identified nonattainment receptors as those monitoring sites that are projected to have average design values that exceed the NAAQS. The EPA separately identified maintenance receptors as those receptors that would have difficulty maintaining the relevant NAAQS in a scenario that takes into account historical variability in air quality at that receptor. The CSAPR approach for identifying nonattainment and maintenance receptors relied only upon air quality model projections of measured design values. In CSAPR, if the average design value in the analysis year was projected to exceed the NAAQS, then the monitoring site is identified as a nonattainment receptor without consideration of whether the monitoring site is currently measuring "clean data" (i.e., design values below the NAAQS based on the most recent three years of measured data). In prior transport rulemakings, such as the NO_X SIP Call and CAIR, the EPA defined nonattainment receptors as those areas that both currently monitor nonattainment and that the EPA projects will be in nonattainment in the future compliance year.[79] We explained that we had the most confidence in our projections of

[79] 63 FR at 57375, 57377; 70 FR at 25241. *See also North Carolina*, 531 F.3d at 913-914 (affirming as reasonable EPA's approach to defining nonattainment in CAIR).

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nonattainment for those counties that also measure nonattainment for the most recent period of available ambient data. In CSAPR, we were compelled to deviate from this practice of incorporating monitored data into EPA's evaluation of projected nonattainment receptors because the most recent monitoring data then available reflected large emission reductions from CAIR, which CSAPR was designed to replace. As recently affirmed by the D.C. Circuit, it was therefore reasonable for the EPA to decide not to compare monitored data reflecting CAIR emissions reductions to its modeling projections that instead excluded CAIR from its baseline.[80]

As the EPA is not replacing an existing transport program in this rule proposal, we are proposing to consider current monitored data as part of the process for identifying projected nonattainment receptors for this rulemaking. Accordingly, in this rule, the EPA is proposing to return to our prior practice of comparing our modeled nonattainment projections to current monitored air quality. For the purposes of this rulemaking, the EPA proposes to identify as nonattainment receptors those monitors that both currently measure nonattainment and that the EPA projects will be in nonattainment in 2017.

[80] *EME Homer City II*, 795 F.3d at 135-36; *see also* 76 FR at 48230-31.

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As noted above, in CSAPR the EPA identified maintenance receptors as those receptors that would have difficulty maintaining the relevant NAAQS in a scenario that takes into account historical variability in air quality at that receptor. The variability in air quality was determined by evaluating the "maximum" future design value at each receptor based on a projection of the maximum measured design value over the relevant period.

The EPA interprets the projected maximum future design value to be a potential future air quality outcome consistent with the meteorology that yielded maximum measured concentrations in the ambient data set analyzed for that receptor. The EPA also recognizes that previously experienced meteorological conditions (e.g., dominant wind direction, temperatures, air mass patterns) promoting ozone formation that led to maximum concentrations in the measured data may reoccur in the future. The maximum design value gives a reasonable projection of future air quality at the receptor under a scenario in which such conditions do, in fact, reoccur. The projected maximum design value is used to identify upwind emissions that, under those circumstances, could interfere with the downwind area's ability to maintain the NAAQS. Therefore, the EPA assesses the magnitude of the maximum projected design

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value for 2017 at each receptor in relation to the 2008 ozone NAAQS and, where such a value exceeds the NAAQS, EPA determines that receptor to be a "maintenance" receptor for purposes of defining interference with maintenance in this proposal, consistent with the method used in CSAPR and upheld by the D.C. Circuit in *EME Homer City II*.[81] That is, monitoring sites with a maximum design value that exceeds the NAAQS are projected to have a maintenance problem in 2017.

Consistent with the CSAPR methodology, monitoring sites with a projected maximum design value that exceeds the NAAQS, but with a projected average design value that is below the NAAQS, are identified as maintenance-only receptors. In addition, those sites that are currently measuring clean data, but are projected to be nonattainment based on the average design value and that, by definition, are projected to have a maximum design value above the standard are also identified as maintenance-only receptors. We are not proposing that monitored data have any effect on the EPA's determination of maintenance receptors using the CSAPR method since even those receptor sites that are not currently monitoring violations are still subject to conditions that may allow violations to reoccur and therefore have future maintenance concerns.

[81] *See* 795 F.3d at 136.

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The following is a brief summary of the procedures for projecting future-year 8-hour ozone average and maximum design values to 2017. Consistent with the EPA's modeling guidance we use the air quality modeling results in a "relative" sense to project future concentrations. That is, the ratios of future year model predictions to base year model predictions are used to adjust ambient ozone design values[82] up or down depending on the relative (percent) change in model predictions for each location. The modeling guidance recommends using measured ozone concentrations for the 5-year period centered on the base year as the air quality data starting point for future year projections. This average design value is used to dampen the effects of inter-annual variability in meteorology on ozone concentrations and to provide a reasonable projection of future air quality at the receptor under "average" conditions. Because the base year for this proposal is 2011, we are using the base period 2009-2013 ambient ozone design value data in order to project 2017 average design values in a manner consistent with the modeling guidance.

The approach for projecting future ozone design values involved the projection of an average of up to 3 design value

[82] The ozone design value at a particular monitoring site is the 3-year average of the annual 4th highest daily maximum 8-hour ozone concentration at that site.

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periods, which include the years 2009-2013 (design values for 2009-2011, 2010-2012, and 2011-2013). The 2009-2011, 2010-2012, and 2011-2013 design values are accessible at www.epa.gov/airtrends/values.html. The average of the 3 design values creates a "5-year weighted average" value. The 5-year weighted average values were then projected to 2017. To project 8-hour ozone design values we used the 2011 base year and 2017 future base-case model-predicted ozone concentrations to calculate relative reduction factors (RRFs) for the location of each monitoring site. The RRFs were applied to the 2009-2013 average ozone design values and the individual design values for 2009-2011, 2010-2012, and 2011-2013 through the following steps:

Step 1: For each monitoring site, we calculate the average concentration across the 10 days with the 10 highest 8-hour daily maximum ozone predictions in the 2017 baseline[83] using the predictions in the nine grid cells that include or surround the location of the monitoring site. The RRF for a site is the ratio of the mean prediction in the future year to the mean prediction

[83] As specified in the attainment demonstration modeling guidance, if there are fewer than 10 modeled days greater than or equal to (>=) 70 ppb, then the threshold is lowered in 1 ppb increments (to as low as 60 ppb) until there are 10 days. If there are fewer than 5 days >= 60 ppb, then an RRF calculation is not completed for that site.

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in the 2011 base year. The RRFs were calculated on a site-by-site basis.[84]

Step 2: The RRF for each site is then multiplied by the 2009-2013 5-year weighted average ambient design value for that site, yielding an estimate of the future average design value at that particular monitoring location.

Step 3: We calculate the maximum future design value by multiplying the RRF for each site by the three base periods (2009-2011, 2010-2012, and 2011-2013) separately. The highest of the three future values is the projected maximum design value. Consistent with the truncation and rounding procedures for the 8-hour ozone NAAQS, the projected design values are truncated to integers in units of ppb.[85]

Projected design values that are greater than or equal to 76 ppb are considered to be violating the NAAQS in 2017. For those sites that are projected to be violating the NAAQS based on the average design values in 2017, we examined measured design values for the period 2012-2014, which is the most recent available measured design values at the time of this proposal. As noted above, we are proposing to identify nonattainment

[84] Sites with insufficient valid design values were not included in the calculation. In addition, sites with fewer than 5 days with predicted 8-hour ozone >= 60 ppb in 2018 were dropped from the analysis.

[85] 40 CFR Part 50, Appendix P to Part 50 – Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone.

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receptors in this rulemaking as those sites that are violating the NAAQS based on current measured air quality and also have projected average design values of 76 ppb or greater. Maintenance-only receptors therefore include both (1) those sites with projected average design values above the NAAQS that are currently measuring clean data and (2) those sites with projected average design values below the level of the NAAQS, but with projected maximum design values of 76 ppb or greater. In addition to the maintenance-only receptors, the 2017 ozone nonattainment receptors are also maintenance receptors because the maximum design values for each of these sites is always greater than or equal to the average design value. The monitoring sites that we project to be nonattainment and maintenance receptors for the ozone NAAQS in the 2017 baseline are used for assessing the contribution of emissions in upwind states to downwind nonattainment and maintenance of ozone NAAQS as part of this proposal.

Table V.C-1 contains the 2009-2013 base period average and maximum 8-hour ozone design values, the 2017 baseline average and maximum design values, and the 2012-2014 design values for the 8 sites in the eastern U.S. projected to be 2017 nonattainment receptors. Table V.C-2 contains this same information for the 6 maintenance-only sites in the eastern U.S.

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that are projected nonattainment but currently measuring clean data. Table V.C-3 contains this same information for the 23 maintenance-only sites in the eastern U.S. that are projected to have average design values below the NAAQS, but maximum design values above the NAAQS. The design values for all monitoring sites in the U.S. are provided in docket item EPA-HQ-OAR-2015-0500-0006. Additional details on the approach for projecting average and maximum design values are provided in the modeling guidance, Model Attainment Test Software[86] documentation, and the AQM TSD. The EPA is seeking comment on the proposed methods for determining projected nonattainment and maintenance receptors.

Table V.C-1. Average and Maximum 2009-2013 and 2017 Baseline 8-Hour Ozone Design Values and 2012-2014 Design Values (ppb) at Projected Nonattainment Sites in the Eastern U.S. (Nonattainment Receptors)

Monitor ID	State	County	Average Design Value 2009-2013	Maximum Design Value 2009-2013	Average Design Value 2017	Maximum Design Value 2017	2012-2014 Design Value
90013007	Connecticut	Fairfield	84.3	89.0	77.1	81.4	84.0
90019003	Connecticut	Fairfield	83.7	87.0	78.0	81.1	85.0
90099002	Connecticut	New Haven	85.7	89.0	77.2	80.2	81.0
480391004	Texas	Brazoria	88.0	89.0	81.4	82.3	80.0
481210034	Texas	Denton	84.3	87.0	76.9	79.4	81.0
484392003	Texas	Tarrant	87.3	90.0	79.6	82.1	77.0
484393009	Texas	Tarrant	86.0	86.0	78.6	78.6	80.0
551170006	Wisconsin	Sheboygan	84.3	87.0	77.0	79.4	81.0

[86] Abt Associates, 2014. User's Guide: Modeled Attainment Test Software. http://www.epa.gov/scram001/modelingapps_mats.htm

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Table V.C-2. Average and Maximum 2009-2013 and 2017 Baseline 8-Hour Ozone Design Values and 2012-2014 Design Values (ppb) at Sites in the Eastern U.S. that are Projected Nonattainment but Currently Measuring Clean Data (Maintenance-Only Receptors)

Monitor ID	State	County	Average Design Value 2009-2013	Maximum Design Value 2009-2013	Average Design Value 2017	Maximum Design Value 2017	2012-2014 Design Value
240251001	Maryland	Harford	90.0	93.0	81.3	84.0	75.0
360850067	New York	Richmond	81.3	83.0	76.3	77.8	73.0
361030002	New York	Suffolk	83.3	85.0	79.2	80.8	73.0
390610006	Ohio	Hamilton	82.0	85.0	76.3	79.1	75.0
482011034	Texas	Harris	81.0	82.0	76.8	77.8	72.0
482011039	Texas	Harris	82.0	84.0	78.2	80.2	72.0

Table V.C-3. Average and Maximum 2009-2013 and 2017 Baseline 8-Hour Ozone Design Values and 2012-2014 Design Values (ppb) at Projected Maintenance Sites in the Eastern U.S. Based on the CSAPR Methodology (Maintenance-Only Receptors)

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Monitor ID	State	County	Average Design Value 2009-2013	Maximum Design Value 2009-2013	Average Design Value 2017	Maximum Design Value 2017	2012-2014 Design Value
90010017	Connecticut	Fairfield	80.3	83.0	75.8	78.4	82.0
211110067	Kentucky	Jefferson	82.0	85.0	75.8	78.6	Incomplete Data
211850004	Kentucky	Oldham	82.0	86.0	73.7	77.3	74.0
240053001	Maryland	Baltimore	80.7	84.0	73.2	76.2	72.0
260050003	Michigan	Allegan	82.7	86.0	75.5	78.5	83.0
261630019	Michigan	Wayne	78.7	81.0	74.0	76.2	74.0
340071001	New Jersey	Camden	82.7	87.0	74.2	78.1	76.0
340150002	New Jersey	Gloucester	84.3	87.0	75.1	77.5	76.0
340230011	New Jersey	Middlesex	81.3	85.0	73.0	76.3	74.0
340290006	New Jersey	Ocean	82.0	85.0	73.9	76.6	75.0
360810124	New York	Queens	78.0	80.0	75.7	77.6	72.0
420031005	Pennsylvania	Allegheny	80.7	82.0	75.3	76.5	77.0
421010024	Pennsylvania	Philadelphia	83.3	87.0	75.1	78.4	75.0
480850005	Texas	Collin	82.7	84.0	74.9	76.0	78.0
481130069	Texas	Dallas	79.7	84.0	74.0	78.0	78.0
481130075	Texas	Dallas	82.0	83.0	75.8	76.7	77.0
481211032	Texas	Denton	82.7	84.0	75.1	76.3	79.0
482010024	Texas	Harris	80.3	83.0	75.9	78.5	72.0
482010026	Texas	Harris	77.3	80.0	73.5	76.1	67.0
482010055	Texas	Harris	81.3	83.0	75.4	77.0	75.0
482011050	Texas	Harris	78.3	80.0	74.6	76.2	72.0
484390075	Texas	Tarrant	82.0	83.0	75.5	76.4	79.0
484393011	Texas	Tarrant	80.7	83.0	74.5	76.6	75.0

D. Pollutant Transport from Upwind States

1. Air Quality Modeling to Quantify Upwind State Contributions

This section documents the procedures the EPA used to quantify the impact of emissions from specific upwind states on 2017 8-hour design values for identified downwind nonattainment

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and maintenance receptors. The EPA used CAMx photochemical source apportionment modeling to quantify the impact of emissions in specific upwind states on downwind nonattainment and maintenance receptors for 8-hour ozone. CAMx employs enhanced source apportionment techniques that track the formation and transport of ozone from specific emissions sources and calculates the contribution of sources and precursors to ozone for individual receptor locations. The strength of the photochemical model source apportionment technique is that all modeled ozone at a given receptor location in the modeling domain is tracked back to specific sources of emissions and boundary conditions to fully characterize culpable sources.

The EPA performed nationwide, state-level ozone source apportionment modeling using the CAMx Ozone Source Apportionment Technology/Anthropogenic Precursor Culpability Analysis (OSAT/APCA) technique[87] to quantify the contribution of 2017 baseline NO_X and VOC emissions from all sources in each state to projected 2017 ozone concentrations at air quality monitoring sites. In the source apportionment model run, we tracked the ozone formed from each of the following contribution categories (i.e., "tags"):

[87] As part of this technique, ozone formed from reactions between biogenic VOC and NO_x with anthropogenic NO_x and VOC are assigned to the anthropogenic emissions.

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- States – anthropogenic NO_X and VOC emissions from each state tracked individually (emissions from all anthropogenic sectors in a given state were combined);
- Biogenics – biogenic NO_X and VOC emissions domain-wide (i.e., not by state);
- Boundary Concentrations – concentrations transported into the modeling domain;
- Tribes – the emissions from those tribal lands for which we have point source inventory data in the 2011 NEI (we did not model the contributions from individual tribes);
- Canada and Mexico – anthropogenic emissions from sources in the portions of Canada and Mexico included in the modeling domain (we did not model the contributions from Canada and Mexico separately);
- Fires – combined emissions from wild and prescribed fires domain-wide (i.e., not by state); and
- Offshore – combined emissions from offshore marine vessels and offshore drilling platforms.

The contribution modeling provided contributions to ozone from anthropogenic NO_X and VOC emissions in each state, individually. The contributions to ozone from chemical reactions between biogenic NO_X and VOC emissions were modeled and assigned to the "biogenic" category. The contributions from wild fire and

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prescribed fire NO_X and VOC emissions were modeled and assigned to the "fires" category. That is, the contributions from the "biogenic" and "fires" categories are not assigned to individual states nor are they included in the state contributions.

The CAMx OSAT/APCA model run was performed for the period May 1 through September 30 using the projected 2017 baseline emissions and 2011 meteorology for this time period. The hourly contributions[88] from each tag were processed to obtain the 8-hour average contributions corresponding to the time period of the 8-hour daily maximum concentration on each day in the 2017 model simulation. This step was performed for those model grid cells containing monitoring sites in order to obtain 8-hour average contributions for each day at the location of each site. The model-predicted contributions were then applied in a relative sense to quantify the contributions to the 2017 average design value at each site. The resulting 2017 contributions from each tag to each monitoring site in the eastern and western U.S. along with additional details on the source apportionment modeling and the procedures for calculating contributions can be found in the AQM TSD. The EPA is seeking comment on the methodologies for calculating ozone contributions.

[88] Contributions from anthropogenic emissions under "NO_X-limited" and "VOC-limited" chemical regimes were combined to obtain the net contribution from NO_X and VOC anthropogenic emissions in each state.

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The average contribution metric is intended to provide a reasonable representation of the contribution from individual states to the projected 2017 design value, based on modeled transport patterns and other meteorological conditions generally associated with modeled high ozone concentrations at the receptor. An average contribution metric constructed in this manner is beneficial since the magnitude of the contributions is directly related to the magnitude of the design value at each site.

The largest contribution from each state in the East to 8-hour ozone nonattainment receptors in downwind states is provided in Table V.D-1. The largest contribution from each state in the East to 8-hour ozone maintenance-only receptors in downwind states is also provided in Table V.D-1.

Table V.D-1. Largest Contribution to Downwind 8-Hour Ozone Nonattainment and Maintenance Receptors for Each State in the Eastern U.S.

Upwind State	Largest Downwind Contribution to Nonattainment Receptors for Ozone (ppb)	Largest Downwind Contribution to Maintenance Receptors for Ozone (ppb
AL	0.79	1.28
AR	0.98	2.15
CT	0.00	0.46
DE	0.37	2.23
DC	0.06	0.73
FL	0.54	0.72

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Upwind State	Largest Downwind Contribution to Nonattainment Receptors for Ozone (ppb)	Largest Downwind Contribution to Maintenance Receptors for Ozone (ppb
GA	0.47	0.58
IL	17.48	23.17
IN	6.24	14.95
IA	0.61	0.85
KS	0.80	1.03
KY	0.75	11.17
LA	3.09	4.23
ME	0.00	0.08
MD	2.07	7.11
MA	0.10	0.37
MI	2.69	1.79
MN	0.40	0.47
MS	0.78	1.48
MO	1.63	3.69
NE	0.24	0.36
NH	0.02	0.07
NJ	8.84	12.38
NY	16.96	17.21
NC	0.55	0.93
ND	0.11	0.28
OH	2.18	7.92
OK	1.70	2.46
PA	9.39	15.93
RI	0.02	0.08
SC	0.16	0.21
SD	0.08	0.12
TN	0.51	1.67
TX	2.44	2.95
VT	0.01	0.05
VA	1.87	5.29
WV	0.95	3.11
WI	0.34	2.59

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2. Application of Screening Threshold

The EPA then evaluated the magnitude of the contributions from each upwind state to downwind nonattainment and maintenance receptors. In this proposal, the EPA uses an air quality screening threshold to identify upwind states that contribute to downwind ozone concentrations in amounts sufficient to "link" them to these to downwind nonattainment and maintenance receptors.

As discussed above in section III, the EPA is proposing to establish the air quality screening threshold calculated as one percent of the NAAQS. Specifically for this rule, we propose calculating an 8-hour ozone value for this air quality threshold of 0.75 ppb as the quantification of one percent of the 2008 ozone NAAQS.

States in the East[89] whose contributions to a specific receptor meet or exceed the screening threshold are considered linked to that receptor; those states' ozone contributions and emissions (and available emission reductions) are analyzed

[89] As discussed in section III this assessment shows that there are problem receptors in the West where western states contribute amounts greater than or equal to the screening threshold used to evaluate eastern states (i.e., 1 percent of the NAAQS). However, there may be additional criteria to evaluate regarding transported air pollution in the West and upwind state obligations. The EPA proposes to focus this rulemaking on eastern states, but seeks comment on whether to include western states in this rule.

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further, as described in section VI, to determine whether and what emissions reductions might be required from each state.

States in the East whose contributions are below the threshold are not included in the proposed rule and are considered to make insignificant contributions to projected downwind air quality problems. However, for eastern states for which the EPA is not proposing FIPs in this action, the EPA notes that updates to the modeling for the final rule could change the analysis as to which states have contributions that meet or exceed the screening threshold. In the event that air quality modeling conducted for the final rule demonstrates that states that contribute amounts below the threshold in the proposal are projected to contribute amounts greater than or equal to the threshold in the final rule modeling, the EPA instead proposes to finalize revised budgets (presented with this rulemaking for comment) for whichever of those states may be identified as linked to such air quality problems. The EPA has calculated emissions budgets for all eastern states that we are proposing to apply to those states if, and only if, the final rule air quality modeling identifies a linkage as just described. These budgets are available in the Ozone Transport Policy Analysis TSD.

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Based on the maximum downwind contributions in Table V.D-1, the following states contribute at or above the 0.75 ppb threshold to downwind nonattainment receptors: Alabama, Arkansas, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maryland, Michigan, Mississippi, Missouri, New Jersey, New York, Ohio, Oklahoma, Pennsylvania, Texas, Virginia, and West Virginia. Based on the maximum downwind contributions in Table V.D-1, the following states contribute at or above the 0.75 ppb threshold to downwind maintenance-only receptors: Alabama, Arkansas, Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, Virginia, West Virginia, and Wisconsin. The linkages between each upwind state and downwind nonattainment receptors and maintenance-only receptors in the eastern U.S. are provided in Table V.D-2 and Table V.D-3, respectively.

Table V.D-2. Linkages between Each Upwind State and Downwind Nonattainment Receptors in the Eastern U.S.

Upwind State	Downwind Nonattainment Receptors		
AL	Tarrant Co, TX (484392003)		
AR	Brazoria Co, TX (480391004)	Tarrant Co, TX (484392003)	Tarrant Co, TX (484393009)
IL	Brazoria Co, TX (480391004)	Sheboygan Co, WI (551170006)	
IN	Fairfield Co, CT (90013007)	Fairfield Co, CT (90019003)	Sheboygan Co, WI (551170006)

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Upwind State	Downwind Nonattainment Receptors		
KS	Sheboygan Co, WI (551170006)		
KY	Sheboygan Co, WI (551170006)		
LA	Brazoria Co, TX (480391004)	Denton Co, TX (481210034)	Tarrant Co, TX (484392003)
	Tarrant Co, TX (484393009)	Sheboygan Co, WI (551170006)	
MD	Fairfield Co, CT (90013007)	Fairfield Co, CT (90019003)	New Haven Co, CT (90099002)
MI	Fairfield Co, CT (90013007)	Fairfield Co, CT (90019003)	New Haven Co, CT (90099002)
	Sheboygan Co, WI (551170006)		
MS	Brazoria Co, TX (480391004)		
MO	Brazoria Co, TX (480391004)	Sheboygan Co, WI (551170006)	
NJ	Fairfield Co, CT (90013007)	Fairfield Co, CT (90019003)	New Haven Co, CT (90099002)
NY	Fairfield Co, CT (90013007)	Fairfield Co, CT (90019003)	New Haven Co, CT (90099002)
OH	Fairfield Co, CT (90013007)	Fairfield Co, CT (90019003)	New Haven Co, CT (90099002)
	Sheboygan Co, WI (551170006)		
OK	Denton Co, TX (481210034)	Tarrant Co, TX (484392003)	Tarrant Co, TX (484393009)
	Sheboygan Co, WI (551170006)		
PA	Fairfield Co, CT (90013007)	Fairfield Co, CT (90019003)	New Haven Co, CT (90099002)
TX	Sheboygan Co, WI (551170006)		
VA	Fairfield Co, CT (90013007)	Fairfield Co, CT (90019003)	New Haven Co, CT (90099002)
WV	Fairfield Co, CT (90013007)	Fairfield Co, CT (90019003)	

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Table V.D-3. Linkages between Each Upwind States and Downwind Maintenance-Only Receptors in the Eastern U.S.

Upwind State	Downwind Nonattainment Receptors		
AL	Hamilton Co, OH (390610006)	Harris Co, TX (482010055)	
AR	Oldham Co, KY (211850004)	Allegan Co, MI (260050003)	Dallas Co, TX (481130069)
	Dallas Co, TX (481130075)	Harris Co, TX (482010026)	Harris Co, TX (482010055)
	Harris Co, TX (482011039)	Harris Co, TX (482011050)	Tarrant Co, TX (484390075)
	Tarrant Co, TX (484393011)		
DE	Camden Co, NJ (340071001)	Gloucester Co, NJ (340150002)	Ocean Co, NJ (340290006)
	Philadelphia Co, PA (421010024)		
IL	Jefferson Co, KY (211110067)	Oldham Co, KY (211850004)	Allegan Co, MI (260050003)
	Wayne Co, MI (261630019)	Camden Co, NJ (340071001)	Gloucester Co, NJ (340150002)
	Ocean Co, NJ (340290006)	Queens Co, NY (360810124)	Suffolk Co, NY (361030002)
	Hamilton Co, OH (390610006)	Allegheny Co, PA (420031005)	Harris Co, TX (482010026)
	Harris Co, TX (482011039)		
IN	Jefferson Co, KY (211110067)	Oldham Co, KY (211850004)	Baltimore Co, MD (240053001)
	Harford Co, MD (240251001)	Allegan Co, MI (260050003)	Wayne Co, MI (261630019)
	Camden Co, NJ (340071001)	Gloucester Co, NJ (340150002)	Middlesex Co, NJ (340230011)
	Ocean Co, NJ (340290006)	Queens Co, NY (360810124)	Richmond Co, NY (360850067)

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Upwind State	Downwind Nonattainment Receptors		
	Suffolk Co, NY (361030002)	Hamilton Co, OH (390610006)	Allegheny Co, PA (420031005)
	Philadelphia Co, PA (421010024)		
IA	Allegan Co, MI (260050003)		
KS	Allegan Co, MI (260050003)	Tarrant Co, TX (484390075)	Tarrant Co, TX (484393011)
KY	Baltimore Co, MD (240053001)	Harford Co, MD (240251001)	Camden Co, NJ (340071001)
	Gloucester Co, NJ (340150002)	Middlesex Co, NJ (340230011)	Ocean Co, NJ (340290006)
	Richmond Co, NY (360850067)	Hamilton Co, OH (390610006)	Allegheny Co, PA (420031005)
	Philadelphia Co, PA (421010024)		
LA	Collin Co, TX (480850005)	Dallas Co, TX (481130069)	Dallas Co, TX (481130075)
	Denton Co, TX (481211032)	Harris Co, TX (482010024)	Harris Co, TX (482010026)
	Harris Co, TX (482010055)	Harris Co, TX (482011034)	Harris Co, TX (482011039)
	Harris Co, TX (482011050)	Tarrant Co, TX (484390075)	Tarrant Co, TX (484393011)
MD	Fairfield Co, CT (90010017)	Gloucester Co, NJ (340150002)	Middlesex Co, NJ (340230011)
	Ocean Co, NJ (340290006)	Queens Co, NY (360810124)	Richmond Co, NY (360850067)
	Suffolk Co, NY (361030002)	Philadelphia Co, PA (421010024)	
MI	Fairfield Co, CT (90010017)	Jefferson Co, KY (211110067)	Oldham Co, KY (211850004)
	Harford Co, MD (240251001)	Camden Co, NJ (340071001)	Gloucester Co, NJ (340150002)
	Ocean Co, NJ (340290006)	Queens Co, NY (360810124)	Richmond Co, NY (360850067)
	Suffolk Co, NY (361030002)	Hamilton Co, OH (390610006)	Allegheny Co, PA (420031005)

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Upwind State	Downwind Nonattainment Receptors		
MS	Harris Co, TX (482010055)	Harris Co, TX (482011039)	
MO	Oldham Co, KY (211850004)	Allegan Co, MI (260050003)	Camden Co, NJ (340071001)
	Hamilton Co, OH (390610006)	Harris Co, TX (482010026)	Harris Co, TX (482010055)
	Harris Co, TX (482011039)	Harris Co, TX (482011050)	
NJ	Fairfield Co, CT (90010017)	Queens Co, NY (360810124)	Richmond Co, NY (360850067)
	Suffolk Co, NY (361030002)	Philadelphia Co, PA (421010024)	
NY	Fairfield Co, CT (90010017)	Camden Co, NJ (340071001)	Gloucester Co, NJ (340150002)
	Middlesex Co, NJ (340230011)	Ocean Co, NJ (340290006)	
NC	Baltimore Co, MD (240053001)		
OH	Fairfield Co, CT (90010017)	Jefferson Co, KY (211110067)	Oldham Co, KY (211850004)
	Baltimore Co, MD (240053001)	Harford Co, MD (240251001)	Wayne Co, MI (261630019)
	Camden Co, NJ (340071001)	Gloucester Co, NJ (340150002)	Middlesex Co, NJ (340230011)
	Ocean Co, NJ (340290006)	Queens Co, NY (360810124)	Richmond Co, NY (360850067)
	Suffolk Co, NY (361030002)	Allegheny Co, PA (420031005)	Philadelphia Co, PA (421010024)
OK	Allegan Co, MI (260050003)	Hamilton Co, OH (390610006)	Dallas Co, TX (481130069)
	Dallas Co, TX (481130075)	Denton Co, TX (481211032)	Harris Co, TX (482010026)
	Harris Co, TX (482011034)	Harris Co, TX (482011039)	Tarrant Co, TX (484390075)
	Tarrant Co, TX (484393011)		
PA	Fairfield Co, CT (90010017)	Baltimore Co, MD (240053001)	Harford Co, MD (240251001)

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Upwind State	Downwind Nonattainment Receptors		
	Camden Co, NJ (340071001)	Gloucester Co, NJ (340150002)	Middlesex Co, NJ (340230011)
	Ocean Co, NJ (340290006)	Queens Co, NY (360810124)	Richmond Co, NY (360850067)
	Suffolk Co, NY (361030002)		
TN	Hamilton Co, OH (390610006)	Philadelphia Co, PA (421010024)	
TX	Baltimore Co, MD (240053001)	Harford Co, MD (240251001)	Allegan Co, MI (260050003)
	Camden Co, NJ (340071001)	Gloucester Co, NJ (340150002)	Ocean Co, NJ (340290006)
	Queens Co, NY (360810124)	Richmond Co, NY (360850067)	Suffolk Co, NY (361030002)
	Hamilton Co, OH (390610006)	Allegheny Co, PA (420031005)	Philadelphia Co, PA (421010024)
VA	Fairfield Co, CT (90010017)	Baltimore Co, MD (240053001)	Harford Co, MD (240251001)
	Gloucester Co, NJ (340150002)	Middlesex Co, NJ (340230011)	Ocean Co, NJ (340290006)
	Queens Co, NY (360810124)	Richmond Co, NY (360850067)	Suffolk Co, NY (361030002)
	Philadelphia Co, PA (421010024)		
WV	Baltimore Co, MD (240053001)	Harford Co, MD (240251001)	Camden Co, NJ (340071001)
	Gloucester Co, NJ (340150002)	Middlesex Co, NJ (340230011)	Ocean Co, NJ (340290006)
	Queens Co, NY (360810124)	Richmond Co, NY (360850067)	Suffolk Co, NY (361030002)
	Hamilton Co, OH (390610006)	Allegheny Co, PA (420031005)	Philadelphia Co, PA (421010024)
WI	Allegan Co, MI (260050003)	Wayne Co, MI (261630019)	

As discussed previously, after the receptor and contribution analyses for this proposal were underway, the EPA

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released an updated IPM base case, version 5.15, and the final CPP. In order to reflect all on-the-books policies as well as the most current power sector modeling data, the EPA performed an assessment to reflect inclusion of IPM 5.15 with the CPP in an ”adjusted” base case for this proposal. All references below to the “adjusted base case” refer to the 2017 air quality modeling base case which has been adjusted to account for the revised IPM 5.15 with CPP emissions. This assessment method relied on the EPA’s air quality modeling contribution data as well as projected ozone concentrations from an illustrative EGU NO_X mitigation scenario. For more information about these methods, refer to the Ozone Transport Policy Analysis Technical Support Document.

This assessment shows that two receptors -- Hamilton County Ohio (390610006) and Richmond County New York (360850067) -- that were projected to have average design values exceeding the NAAQS in the modeled 2017 baseline, are expected to have average design values below the NAAQS with the adjusted base case. However, these receptors are still expected to have maximum design values exceeding the NAAQS with the adjusted base case. Because both of these receptors are also considered maintenance receptors for the purposes of this proposal, their status as

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identified air quality concerns and the status of states linked to these receptors is unchanged by the adjusted base case.

This assessment also shows that four receptors – Allegheny County Pennsylvania (420031005), Collin County Texas (480850005), Wayne County Michigan (261630019), and Middlesex County New Jersey (340230011) -- that were projected to have maximum design values exceeding the NAAQS in the modeled base case, are expected to have maximum design values below the NAAQS with the adjusted base case. With the adjusted base case, these sites would not be considered nonattainment or maintenance receptors for the purposes of this proposal. However, because no state is linked solely to any one of these sites, changing the status of these receptors does not impact the scope of states linked to downwind nonattainment or maintenance receptors for this proposal.

In addition to evaluating the status of downwind receptors identified for this proposal, the EPA evaluated whether the adjusted base case would reduce ozone contributions from upwind states to the extent that a previously linked state would have a maximum contribution less than the 1% threshold. This assessment shows that in the adjusted base case, all states are expected to remain linked (i.e., contribute greater than or equal to 1% of the NAAQS) to at least one downwind nonattainment or maintenance

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receptor. Therefore, using the adjusted base case for this proposal does not impact the scope of states linked to downwind nonattainment or maintenance receptors relative to the modeled base case.

The EPA seeks comment on this analysis, but notes that for the final rule, the EPA intends to rely on full air quality modeling of the adjusted base case to identify nonattainment and maintenance receptors and to inform the analysis of interstate ozone transport for the 2008 ozone NAAQS.

The analyses that EPA uses in section VI to quantify EGU NO_X ozone-season emissions budgets for this proposal rely on the adjusted base case.

VI. Quantifying Upwind-State EGU NO_X Reduction Potential to Reduce Interstate Ozone Transport for the 2008 NAAQS

A. Introduction

This section describes the EPA's proposed quantification of near-term EGU NO_X reductions that are necessary to fulfill (at least in part) the Clean Air Act requirement to address interstate ozone transport for the 2008 NAAQS. This section also describes the EPA's proposal to translate these reductions into EGU NO_X ozone-season emissions budgets. Section VII describes the

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EPA's proposal to implement these proposed emissions budgets via updates to the existing CSAPR NO_X ozone-season trading program.

As described in section V, the EPA separately identified nonattainment receptors and maintenance receptors. The EPA proposes to apply a single approach for quantifying an upwind state's ozone transport obligation to both nonattainment and maintenance receptors. It is reasonable to apply the same approach to quantify upwind-state reduction requirements with respect to both nonattainment and maintenance because the structure of the problems is the same — emissions from sources in upwind states contributing to downwind ozone concentrations that put the downwind receptor at risk of nonattainment with respect to the EPA's clean air standards. Moreover, as all nonattainment receptors are also maintenance receptors because the maximum design value will always be equal to or exceed the average design value, it is reasonable to control all sites consistent with the level of control necessary to reduce maintenance concerns.

As described in section III of this preamble, due to the impending July 2018 moderate area attainment date, the EPA is proposing, as a first step, to quantify near-term EGU NO_X ozone-season emission reductions to reduce interstate ozone transport for the 2008 ozone NAAQS. For this section, this means that the

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EPA is proposing to quantify ozone season EGU NO_X reductions achievable for the 2017 ozone season (i.e., the last full ozone season prior to the July 2018 attainment date).

The EPA's assessment of upwind state obligations in this proposal reflects application of a multi-factor test that considers cost, available emission reductions, and air quality. This is the same multi-factor test used in the original CSAPR. This multi-factor test considers increasing levels of uniform control stringency, where each level is represented by cost, to determine the appropriate magnitude of pollution reduction that would reduce the impacts of interstate transport on downwind states and to apportion that reduction responsibility among collectively-contributing upwind states. This approach to quantifying upwind state emission reduction obligations was reviewed by the Supreme Court in *EPA v. EME Homer City Generation*, which held that using such an approach to apportion reduction responsibilities among upwind states that are collectively responsible for downwind air quality impacts "is an efficient and equitable solution to the allocation problem the Good Neighbor Provision requires the Agency to address." 134 S.Ct. at 1607.

There are three steps in developing and applying the multi-factor test to quantify upwind state emission reductions as to

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the 2008 ozone NAAQS: (1) identify NO_X mitigation strategies, focusing on those that can be in place for the 2017 ozone season; (2) develop uniform EGU NO_X cost thresholds based on these NOx mitigation strategies; (3) assess EGU NO_X mitigation potential that is achievable for 2017 and assess corresponding air quality improvements resulting from the application of each uniform cost threshold, including to check for over-control. This multi-factor evaluation informs the EPA's determination of appropriate ozone season EGU NO_X reductions necessary to reduce significant contribution to nonattainment and interference with maintenance of the 2008 ozone NAAQS for the proposed 2017 compliance year. These steps are discussed in further detail in the following sections.

This proposal evaluates a range of uniform EGU NO_X costs from $500 per ton to $10,000 per ton. This range, and the intermediate uniform NO_X cost thresholds evaluated within that range, were selected based on the cost thresholds at which various EGU NO_X control technologies are widely available, the use of certain EGU NO_X cost thresholds in previous rules to address ozone transport, and EGU NO_X cost thresholds incorporated into state requirements to address ozone nonattainment.

The EPA evaluated the emission reduction potential in each upwind state at each uniform NO_X cost threshold using IPM. In

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this case, the EPA limited IPM's evaluation of NO_X mitigation strategies to those that can be implemented for the 2017 ozone season, which is the proposed compliance timing for this rule, as described in section VI.B below.

B. NO_X Mitigation Strategies

The following sub-sections describe the EPA's assessment of EGU and non-EGU point source NO_X mitigation strategies. For more details on these assessments, refer to the EGU NO_X Mitigation Strategies TSD and the Update to Non-EGU Emission Reductions Cost and Potential for States with Potentially Significant Contributions under the 2008 Ozone Standard TSD in the docket for this proposed rule.

1. EGU NO_X Mitigation Strategies

In developing this proposed rule, the EPA considered all widely used EGU NO_X control strategies: fully operating existing Selective Catalytic Reduction (SCR) and Selective Non-Catalytic Reduction (SNCR) – including optimizing NO_X removal by existing, operational SCRs and SNCRs and turning on and optimizing existing idled SCRs and SNCRs; installation of (or upgrading to) state-of-the-art NO_X combustion controls; shifting generation to units with lower NO_X emission rates within the same state; and installing new SCRs and SNCRs. Although this proposal does not require or impose any specific technology standards to

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demonstrate compliance, EPA determined that certain technologies would be available by the 2017 timeframe when assessing potential reductions in the region.

For the reasons explained below, the EPA determined that the power sector could implement all of these NO_X mitigation strategies, except installation of new SCRs or SNCRs, between finalization of this proposal in summer of 2016 and the 2017 ozone season. As to the installation of new SCRs or SNCRs, the amount of time from contract award through commissioning for retrofit with new SCR or SNCR exceeds 18 and 12 months, respectively. For both technologies, conceptual design, permitting, financing, and bid review require additional time. It would therefore not be feasible to retrofit new SCR or SNCR to achieve EGU NO_X reductions in the 2017 ozone season. See EGU NO_X Mitigation Strategies TSD for discussion of feasibility of EGU NO_X controls for the 2017 ozone season. Therefore, the EPA analyzed the remaining strategies for purposes of quantifying upwind state obligations in this rule. Exclusion of new SCR and SNCR installation from this analysis reflects a determination only that these strategies are infeasible by 2017, not a determination that they are infeasible or inappropriate for consideration of cost-effective NO_X reduction potential over a

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longer timeframe. The EPA requests comment on what EGU NO_X mitigation strategies are feasible for the 2017 ozone season.

a. Fully Operating Existing SCRs and SNCRs

Fully operating existing SCR and SNCRs can significantly reduce EGU NO_X emissions quickly, using investments that have already been made. SCRs can achieve up to 90 percent reduction in EGU NO_X (with sufficient installed catalyst), while SNCRs can achieve 20-30 percent reduction in EGU NO_X, beyond the reductions from combustion controls. These controls are in widespread use across the U.S. power sector. In the east, approximately 64 percent of coal-fired EGU capacity and 75 percent of natural gas combined cycle (NGCC) EGU capacity is equipped with SCR or SNCR. Recent power sector data reveal that some SCR and SNCR controls are being underused.[90] In some cases, controls are not fully operating (i.e., the controls could be operated at a higher NO_X removal rate). In other cases, controls have been idled for years. Fully operating existing SCR and SNCR would be a cost-effective and readily available approach for EGUs to reduce NO_X emissions and the EPA evaluated this NO_X mitigation strategy in quantifying EGU NO_X obligations for this proposal.

[90] This assessment is available in the EGU NO_X Mitigation Strategies TSD.

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For existing SCRs and SNCRs that are operating to some extent, but not at their full pollution control capability, the EPA's analysis determined that $500 per ton represents the costs reflective of fully operating these systems. Because the SCR or SNCR is already installed and is at least to some extent operating, the EPA assumes that additional reagent (i.e., ammonia or urea) is the only significant cost required for full operation. We observe that urea can cost on the order of $300 per metric ton. The cost for anhydrous ammonia is around $750 per ton.[91] In our assessment, we assume that a 50 percent solution is used in removing an equivalent amount of NO_X. Thus, we estimate that sufficient reagent could be purchased at a cost of $500 per ton of NO_X removed to achieve full operation for most SCRs and SNCRs. For more details on this assessment, refer to the EGU NO_X Mitigation Strategies TSD in the docket for this proposed rule. The proposal seeks comment on this assessment.

The operational difference between not fully operating and fully operating existing SCRs and SNCRs is increasing reagent

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[91] Schnitkey, G. "Nitrogen Fertilizer Prices and 2015 Planting Decisions." *farmdoc daily* (4):195, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, October 9, 2014.

Permalink URL http://farmdocdaily.illinois.edu/2014/10/nitrogen-fertilizer-prices-and-2015-planting-decisions.html

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(i.e., ammonia or urea) flow rate and ensuring sufficient reagent exists to sustain higher flow operations. Therefore, increasing NO_X removal from these controls can be implemented by procuring more reagent. Stocking-up additional reagent for sustaining increased NOX removal could be done in a one or two weeks.[92]

For existing SCRs and SNCRs that have been idled for years, unit operators may need to restart payment of some fixed and variable costs associated with that control. Fixed and variable costs include labor, maintenance and repair, reagent, parasitic load, and ammonia or urea. As further detailed in the EGU NO_X Mitigation Strategies TSD, which is found in the docket for this proposed rule, the EPA performed an in-depth cost assessment for all coal-fired units with SCRs, finding that 90 percent of the units had total SCR operation costs of $1,300 per ton of NO_X removed, or less.

Based on this assessment, the EPA proposes that turning on and fully operating idled SCRs is widely available at a uniform cost of $1,300 per ton of NO_X removed. For more details on this assessment, refer to the EGU NO_X Mitigation Strategies TSD in the

[92] This assessment is available in the EGU NO_X Mitigation Strategies TSD.

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docket for this proposed rule. The proposal seeks comment on this assessment.

The EPA performed a similar assessment for fully operating existing idled SNCR systems, finding that the majority of the total fixed and variable operating cost for SNCR is related to the cost of the reagent used (e.g., ammonia or urea) and that the resulting cost per ton of NO_X reduction is sensitive to the NO_X rate of the unit prior to SNCR operation. Based on the results of this analysis, and in order to represent a broad range of unit-level NO_X rates before SNCR operation, the EPA proposes that turning on and fully operating idled SNCRs is widely available at a uniform cost of $3,400 per ton of NO_X removed. For more details on this assessment, refer to the EGU NO_X Mitigation Strategies TSD in the docket for this proposed rule. The proposal seeks comment on this assessment and on higher cost thresholds that would require some installation of new SCRs/SNCRs and the appropriate timetable or phase-in needed to accommodate those technologies.

The EPA also evaluated the feasibility of turning on idled SCR and SNCR for the 2017 ozone season. Based on past practice and the possible effort to restart the controls (e.g., stockpiling reagent, bringing the system out of protective lay-up, performing inspections, etc.), returning these idled

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controls to operation should be available in equal to or less than 3 months.[93] The proposal seeks comment on this assessment.

b. State-of-the-art NO_X Combustion Controls

State-of-the-art combustion controls such as low-NO_X burners (LNB) and/or over-fire air (OFA) are cost-effective, can be installed quickly, and can significantly reduce EGU NO_X emissions. Ninety-nine percent of coal-fired EGU capacity in the East is equipped with some form of combustion control. Combustion controls alone can achieve NO_X emission rates of 0.15 to 0.50 lb/mmBtu. Once installed, combustion controls reduce NO_X emissions at all times of EGU operation. State-of-the-art combustion controls would be a cost-effective, timely, and readily available approach for EGUs to reduce NO_X emissions and the EPA included this NO_X mitigation strategy in quantifying EGU NO_X reductions for this proposal.

The cost of state-of-the-art combustion controls per ton of NO_X reduced is dependent on the combustion control type and unit type. We estimate the cost per ton of state-of-the-art combustion controls to be $500 per ton to $1,200 per ton of NO_X removed. To be conservative, the EPA proposes that installation

[93] This assessment is available in the EGU NO_X Mitigation Strategies TSD.

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of (or upgrading to) state-of-the-art NO_X combustion controls is widely available at $1,300 per ton of NO_X removed.

As described in CSAPR the EPA has observed that upgrade, replacement, or installation of combustion controls has been demonstrated to be achievable within the timeframe provided for by this rulemaking and its compliance dates.[94] The EPA revisited this analysis with data specific to this proposal and proposes that a 2017 compliance timeframe is feasible for this EGU NO_X mitigation strategy. These controls are fully proven, widely used, and with a reasonable effort can be procured, designed, installed, tested and be in operation on any coal-steam EGU consistent with the compliance timeframe provided for this rulemaking. The EPA proposes that this will be feasible for the 2017 ozone season. The proposal seeks comment on additional EGU NOx mitigation strategies that may be feasible for the 2017 ozone season.

For more details on this assessment, refer to the EGU NO_X Mitigation Strategies TSD in the docket for this proposed rule. The proposal seeks comment on this assessment.

c. Shifting Generation to Lower NO_X-emitting EGUs

[94] "Installation Timing for Low NOx Burners (LNB)", Docket ID No. EPA-HQ-OAR-2009-0491-0051

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Shifting generation to lower NO_X-emitting EGUs, similar to operating existing post-combustion controls, uses investments that have already been made, can be done quickly, and can significantly reduce EGU NO_X emissions.

Since CSAPR was promulgated, electricity generation has trended toward lower NO_X-emitting generation due to market conditions (e.g., low natural gas prices) and state and federal environmental policies. For example, new NGCC facilities, which represented 45% of new 2014 capacity, can achieve NO_X emission rates of 0.0095 lb/mmBtu, compared to existing coal steam facilities, which emitted at an average rate across the 23 states included in this proposal of 0.18 lbs/mmBtu of NO_X in 2014. This substantial difference in NO_X emission performance between existing coal steam and new NGCC generation is due both to higher nitrogen content in coal compared to natural gas, as well as to the substantially lower generating efficiency of steam combustion technology compared to combined cycle combustion technology. Shifting generation to lower NO_X-emitting EGUs would be a cost-effective, timely, and readily available approach for EGUs to reduce NO_X emissions and the EPA included this NO_X mitigation strategy in quantifying EGU NO_X obligations for this proposal.

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Shifting generation to lower NO_X-emitting EGUs occurs on a continuum in response to economic factors such as fuel costs and uniform NO_X cost thresholds, including those evaluated for this proposal (i.e., relatively lower uniform NO_X cost thresholds incentivize relatively fewer EGU NO_X reductions resulting from shifting generation, while relatively higher uniform NO_X cost thresholds encourage more EGU NO_X reductions driven by shifting generation). As a result, the EPA quantified reduction potential from this EGU NO_X mitigation strategy at each cost level identified that represents the availability of other pollution control measures evaluated in our assessment of uniform NO_X cost thresholds described in section VI.C.

In this analysis, the EPA assumed shifting generation to units with lower NO_X emission rates could occur within the same state by the near-term 2017 implementation timing for this proposed rule when assessing state emission reduction potential for emissions budget purposes. This conservative approach does not capture emission reductions that would occur if generation was shifted more broadly among units in different states, which the EPA believes is feasible over time but which may be subject to out-of-merit order dispatch constraints in the near term. Limiting such generation shifting potential to units within each state is not a reflection of how generation shifting works in

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practice (given that the grid crosses state boundaries); instead, it is an analytic proxy designed to respect the feasibility of near-term generation shifting in light of these potential near-term out-of-merit order dispatch constraints. The EPA seeks comment on this assessment and on this limitation in quantifying EGU NO_X reduction potential for the 2017 ozone season.

2. Non-EGU NO_X Mitigation Strategies

The EPA is not proposing to address non-EGU emission reductions in its efforts to reduce interstate ozone transport for the 2008 ozone NAAQS at this time. Compared to EGUs, there are relatively more non-EGU point sources and these sources on average are smaller than EGUs. The implication of these fleet characteristics is that there are more individual sources to control and there are relatively fewer emission reductions available from each source. Given the proposed 2017 implementation timing for this rule, we are uncertain that significant aggregate NO_X mitigation is achievable from non-EGU point sources for 2017. Moreover, there is greater uncertainty in the EPA's assessment of non-EGU point-source NO_X mitigation potential (see below). The EPA requests comment on these issues, including how non-EGU reductions should be addressed and considered in fulfilling upwind states' good neighbor

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obligations under the 2008 ozone standard in the future, as the control of non-EGUs may be a necessary part of addressing states' full transport obligation. States can always choose to reduce non-EGU emissions via good neighbor SIPs.

The EPA has evaluated the potential for ozone season NO_X reductions from non-EGU sources. A detailed discussion of this assessment is provided in the Non-EGU NO_X Mitigation Potential TSD, located in the docket for this proposed rule. This TSD discusses non-EGU source category emissions, EPA tools for estimating emission reductions from non-EGU categories, and efforts, to date, to review and refine our estimates for certain states. In addition, the TSD contains brief discussions of available controls, costs, and potential emission reductions for a few specific source categories. The EPA views this non-EGU assessment as an initial step in future efforts to evaluate non-EGU categories that may be necessary to fully quantify upwind states' significant contribution to nonattainment and interference with maintenance. The EPA seeks comment on its assessment that non-EGU controls are not feasible by the 2017 ozone-season. It also seeks comment on its broader non-EGU NO_X mitigation assessment and the availability of non-EGU NO_X emission reductions to mitigate interstate ozone transport in years following 2017.

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Although EPA did not find non-EGU reductions feasible by 2017 in this proposal, it is taking comment on that assessment. Future EPA rulemakings or guidance could revisit the potential for reductions from non-EGU sources. Under such a scenario, EPA could use a similar approach of identifying appropriate cost thresholds for non-EGUs and EGUs alike, and then identify potential emission reductions and corresponding emission budgets. Under this scenario, an emission budget could be established for all covered sources (e.g., EGUs and non-EGUs alike) with fungible allowances. EPA is taking comment on the potential to combine EGUs and non-EGUs into a single trading program to resolve the remaining non-attainment and maintenance issues at a later date.

C. Uniform EGU Cost Thresholds for Assessment

As discussed above, the multi-factor test used here considers increasing levels of uniform control stringency, where each level is represented by cost, in combination with consideration of NO_X reduction potential and corresponding air quality improvements. To determine which cost thresholds to use to assess upwind state NO_X mitigation potential, the EPA evaluated EGU NO_X control costs that represent the thresholds at which various control technologies are widely available (described previously in section VI.B), the use of certain cost

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thresholds in previous rules to address ozone transport, and cost thresholds incorporated into state requirements to address ozone nonattainment.

The EPA began by determining the appropriate range of costs to evaluate. The lower end of the range is informed by a confluence of considerations. In CSAPR, $500 per ton was the EGU NO_X cost threshold relied upon to partially address ozone transport for the less stringent 1997 standard. It is also the lowest marginal cost where EPA expects NO_X reduction to be cost effective, based on our assessment of EGU NO_X mitigation strategies (see section B). Specifically, the cost of this approach to NO_X reduction is the marginal cost of running currently operating SCR and SNCR systems at higher levels of NO_X removal than they are currently achieving. The EPA has not identified a discrete NO_X pollution control measure that would achieve sufficient emission reductions to address relevant air quality impacts at an estimated cost of less than $500 per ton; as a result, the EPA has not included a representation of such a cost level in this proposal's analyses.[95]

The EPA then evaluated EGU NO_X cost thresholds to determine an appropriate upper bound for our assessment. The EPA

[95] Additionally, the EPA notes that, as discussed in more detail below, no identified air quality problems were resolved at the $500 per ton cost threshold. Accordingly, it would not be practical for the EPA to evaluate emission reductions achieved at cost thresholds below $500 per ton.

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identified $10,000 per ton as an upper bound, exceeding the costs of operating existing or installing new EGU NO_X controls.

The EPA seeks comment on whether $500 per ton is an appropriate minimum and $10,000 per ton is an appropriate maximum uniform cost threshold to evaluate for the purpose of quantifying EGU NO_X reductions to reduce interstate ozone transport for the 2008 ozone NAAQS.

The EPA then determined appropriate EGU NO_X cost thresholds to evaluate within the range of $500 per ton to $10,000 per ton. As described above, these cost thresholds are informed by our assessment of the costs at which EGU NO_X control strategies are widely available. While the EPA could evaluate additional cost thresholds in between those selected, this would not yield meaningful insights as to NO_X reduction potential. The EPA has identified cost thresholds where control technologies are widely available and thereby where the most significant incremental emission reduction potential is expected. Analyzing costs between these cost thresholds is not expected to reveal significant incremental emission reduction potential that isn't already anticipated at the analyzed cost thresholds. Table VI.C-1 lists the EGU NO_X cost thresholds evaluated and the NO_X reduction strategy or policy used to identify each cost threshold.

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Table VI.C-1

EGU NO_X Cost Threshold	
$500/ton	CSAPR ozone season NO_X cost threshold; fully operating post-combustion controls that are already running.
$1,300/ton	Widespread availability of restarting idled SCRs and state of the art combustion controls
$3,400/ton	NO_X SIP Call ozone season NO_X cost threshold, adjusted to 2014$; Widespread availability of restarting idled SNCRs
$5,000/ton	Widespread availability of new SCRs[96]
$6,400/ton	Widespread availability of new SNCRs[97]
$10,000/ton	Upper bound

The EPA proposes that this range and selection of interim uniform cost thresholds are appropriate to evaluate potential EGU NO_X reduction obligations to address interstate ozone transport for the 2008 ozone NAAQS. Because these cost thresholds are linked to costs at which EGU NO_X mitigation strategies become widely available in each state, the cost thresholds represent the break points at which the most significant step-changes in EGU NO_X mitigation are expected. The

[96] The cost assessment for new SCR is available in the EGU NO_X Mitigation Strategies TSD. While chosen to define a cost-threshold, new SCRs were not considered a feasible control on the compliance timeframe being proposed for this rule.

[97] The cost assessment for new SNCR is available in the EGU NO_X Mitigation Strategies TSD. While chosen to define a cost-threshold, new SNCRs were not considered a feasible control on the compliance timeframe being proposed for this rule.

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EPA seeks comment on the appropriateness of evaluating these uniform cost thresholds for the purpose of quantifying EGU NO_X reductions to reduce interstate ozone transport for the 2008 ozone NAAQS.

D. Assessing Cost, EGU NO_X Reductions, and Air Quality

The EPA analyzed ozone season NO_X emission reductions available from the power sector in each state using IPM.[98] The agency analyzed levels of uniform control stringency, where each level is represented by uniform EGU NO_X cost thresholds listed in Table VI.C-1 above and repeated here: $500 per ton; $1,300 per ton; $3,400 per ton; $5,000 per ton; $6,400 per ton; and $10,000 per ton. The EPA limited IPM's NO_X mitigation strategies to those that could be implemented for 2017, as described in section VI.B.

The analysis applied these uniform EGU NO_X cost thresholds to EGUs in the 48 contiguous United States and the District of Columbia, starting in 2017. The analysis covered EGUs with a capacity (electrical output) greater than 25 MW to make the analysis similar to previous analyses done for interstate transport purposes. The EGU Emission Reduction Cost Analysis TSD, which is in the docket for this proposed rule, provides

[98] IPM version 5.14 is discussed in preamble section IV.B. IPM documentation is in the docket and available at www.epa.gov/powersectormodeling.

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further details of EPA's analysis of ozone season NO_X emission reductions occurring at the representative EGU NOx cost thresholds analyzed for the 2017 ozone season.

Table VI.D-1 shows the 2017 baseline EGU emissions and ozone season NO_X reduction potential in each state corresponding to the uniform cost levels.

Table VI.D-1. EGU Ozone Season NO_X Emission Reductions (Tons)

State	2017 Emissions (short tons)	Reduction Potential (short tons) at Various Representative Marginal Costs per Ton (in 2011$)		
	Base Case	$500/ton	$1,300/ton	$3,400/ton
Alabama	13,289	1,729	3,582	3,670
Arkansas	6,224	13	104	859
Illinois	10,021	395	472	546
Indiana	41,748	6,611	12,173	12,989
Iowa	7,911	186	423	717
Kansas	11,332	428	438	465
Kentucky	27,141	3,608	11,896	12,382
Louisiana	10,897	64	117	400
Maryland	6,470	1,028	1,026	1,164
Michigan	20,049	403	3,033	3,528
Mississippi	7,871	82	297	893
Missouri	17,050	934	996	1,152
New Jersey	3,302	370	372	378
New York	4,948	115	284	359
North Carolina	14,435	1,922	1,922	3,526
Ohio	27,795	5,746	9,646	9,666
Oklahoma	19,593	703	2,170	3,169
Pennsylvania	41,533	2,210	26,759	26,791
Tennessee	5,554	74	113	146
Texas	58,199	685	3,610	5,810
Virginia	7,196	423	539	1,587
West Virginia	25,384	592	10,908	12,014
Wisconsin	5,257	5	36	107
Total	393,198	28,325	90,916	102,318

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Table VI.D-1 (continued). EGU Ozone Season NO_X Emission Reductions (Tons)

State	Reduction Potential (short tons) at Various Representative Marginal Costs per Ton (in 2011$)		
	$5,000/ton	$6,400/ton	$10,000/ton
Alabama	4,780	5,418	5,840
Arkansas	1,147	1,242	1,935
Illinois	622	640	761
Indiana	13,770	13,437	17,109
Iowa	717	717	1,317
Kansas	677	838	1,150
Kentucky	12,473	13,456	14,503
Louisiana	461	467	706
Maryland	1,176	1,369	1,369
Michigan	3,756	3,889	4,411
Mississippi	1,165	1,479	2,208
Missouri	1,298	1,930	2,775
New Jersey	381	384	465
New York	370	661	906
North Carolina	3,626	4,415	4,643
Ohio	9,773	10,078	10,231
Oklahoma	3,821	5,702	6,609
Pennsylvania	26,913	26,932	27,091
Tennessee	224	241	285
Texas	6,940	7,772	8,380
Virginia	3,104	3,560	3,610
West Virginia	12,211	12,243	12,243
Wisconsin	131	276	618
Total	109,535	117,145	129,166

Next, the EPA performed a combined multi-factor assessment of costs (i.e., the uniform cost thresholds evaluated), EGU NO_X reductions (i.e., the reductions in Table VI.D-1), and corresponding improvements in downwind ozone concentrations. For this assessment, the EPA used simplifying assumptions regarding the relationship between EGU NO_X emissions and corresponding ozone concentrations at nonattainment and maintenance receptors

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of concern. For more information about how this assessment was performed, refer to the Ozone Transport Policy Analysis Technical Support Document.

For each nonattainment or maintenance receptor identified for this proposal, the EPA evaluated the air quality improvement at that receptor that is expected from progressively more stringent upwind EGU NO_X reductions in states that are linked to that receptor. For example, the EPA evaluated the Harford County Maryland receptor with all linked states controlling their emissions at $500 per ton. This assessment showed a 0.35 ppb reduction in expected ozone design values at $500 per ton. The residual design values at this site are still expected to exceed the 2008 ozone NAAQS with an average design value of 81.2 ppb and a maximum design value of 83.9 ppb. Next, the EPA evaluated this receptor with all linked states controlling their emissions at $1,300 per ton. This assessment showed a 0.94 ppb reduction in expected ozone design values. At a cost threshold of $1,300 per ton, the residual design values at this site are expected to continue to exceed the 2008 ozone NAAQS with an average design value of 80.6 ppb and a maximum design value of 83.3 ppb. With respect to this receptor, the EPA then evaluated each progressively more stringent uniform control stringency (i.e. $3,400 per ton; $5,000 per ton; $6,400 per ton; and $10,000 per

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ton). Generally, the EPA evaluated the air quality improvements at each monitoring site for each progressively more stringent uniform EGU NO_X control level. This information is available in the Ozone Transport Policy Analysis TSD.

This approach evaluates interstate ozone transport for each receptor independently. Also, by evaluating the downwind ozone impact of upwind reductions that are made in all linked states at the same uniform control stringency, this approach provides equitable treatment of all upwind states as to their contribution to each downwind receptor to which they are linked.

The EPA aggregates the relevant data (i.e., cost of control, EGU NO_X reduction potential, and downwind ozone reduction metrics) in a multi-factor test that allows the EPA to evaluate the cost-effectiveness of various levels of emission reductions and the resulting improvements in downwind ozone concentrations.

This evaluation shows that meaningful EGU NO_X reductions are available at reasonable cost and that these reductions can provide meaningful improvements in downwind ozone concentrations at the identified nonattainment and maintenance receptors for this proposal. For example, the combined downwind ozone improvement across nonattainment and maintenance receptors is

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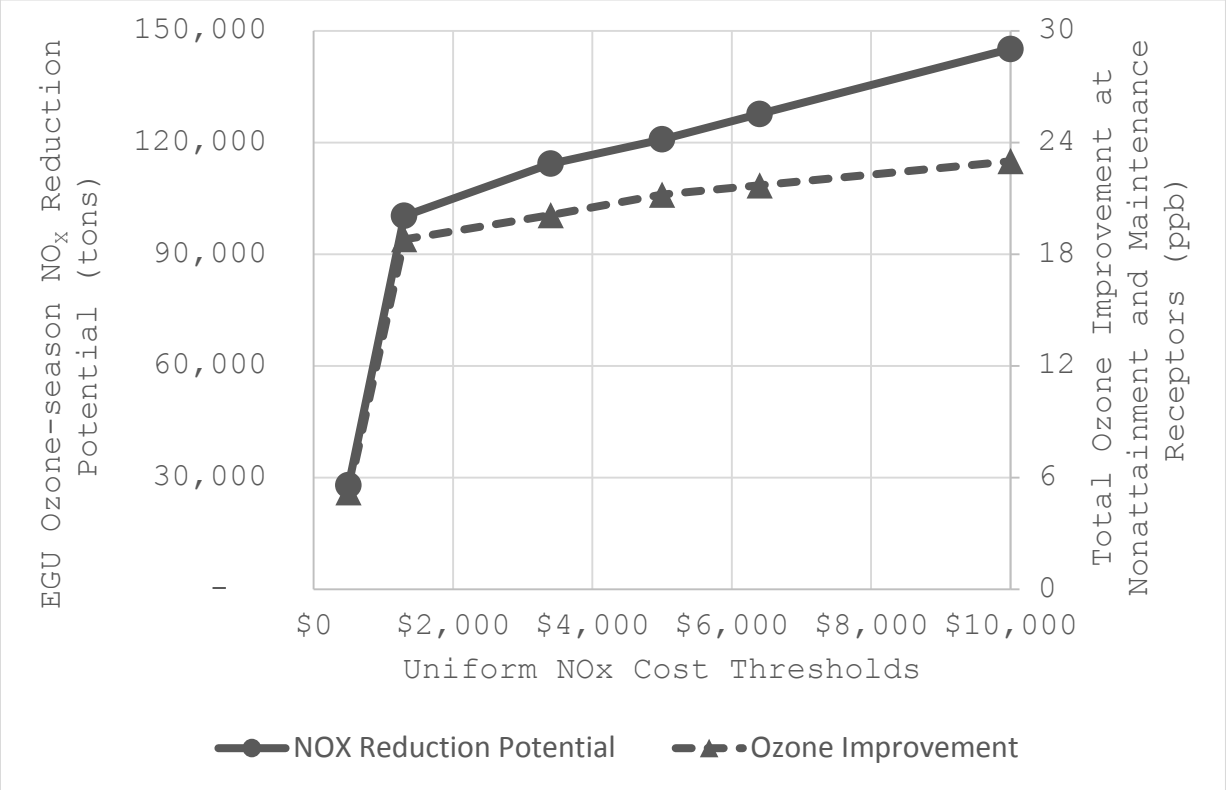
approximately 19 ppb at the $1,300 per ton level. See Figure VI.1.

Figure VI.1. EGU Ozone season NO_X Reduction Potential in 24 linked states and Corresponding Total Reduction in Downwind Ozone Concentrations at Nonattainment and Maintenance Receptors for each Uniform NO_X Cost Evaluated



Combining costs, EGU NO_X reductions, and corresponding improvements in downwind ozone concentrations results in a "knee in the curve" at $1,300 per ton. This uniform cost of reduction represents the threshold at which EGU NO_X reduction potential and corresponding downwind ozone air quality improvements are maximized with respect to marginal cost. That is, the ratio of

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emission reductions to marginal cost and the ratio of ozone improvements to marginal cost are maximized relative to the other uniform cost thresholds evaluated. Further, at higher cost thresholds, as a result of this analysis we do not anticipate significant additional reductions that would justify these higher costs.

As part of this analysis, the EPA evaluates potential over-control with respect to whether (1) the expected ozone improvements would be sufficient or greater than necessary to resolve the downwind ozone pollution problem (i.e., resolving nonattainment or maintenance problems) or (2) the expected ozone improvements would reduce upwind state ozone contributions to below the screening threshold (i.e., 1% of the NAAQS).

In *EME Homer City*, the Supreme Court held that EPA cannot "require[] an upwind State to reduce emissions by more than the amount necessary to achieve attainment in *every* downwind State to which it is linked." 134 S.Ct. at 1608. On remand from the Supreme Court, the D.C. Circuit held that this means that EPA might overstep its authority "when those downwind locations would achieve attainment even if less stringent emissions limits were imposed on the upwind States linked to those locations." *EME Homer City II*, 795 F.3d at 127. The D.C. Circuit qualified this statement by noting that this "does not mean that every

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such upwind State would then be entitled to less stringent emission limits. Some of those upwind States may still be subject to the more stringent emissions limits so as not to cause *other* downwind locations to which those States are linked to fall into nonattainment." *Id.* at 14-15.

Consistent with these instructions from the Supreme Court and the D.C. Circuit, the EPA evaluated whether reductions quantified under the evaluated cost thresholds can be anticipated to resolve any downwind nonattainment or maintenance problems (as defined in section V) and by how much.

The EPA's assessment shows that the uniform control stringency represented by $500 per ton would resolve the maintenance problem at two downwind maintenance receptors -- Ocean County New Jersey (maximum design value of 75.9 ppb) and Oldham County Kentucky (maximum design value of 75.8 ppb). Because no state is linked solely to one of these maintenance receptors, resolving these downwind air quality impact does not fully address any individual upwind state's good neighbor obligation.

This assessment shows that the uniform control stringency represented by $1,300 per ton would resolve maintenance problems at three additional downwind maintenance receptors -- Baltimore County Maryland (maximum design value of 75.6 ppb), Hamilton

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County Ohio (maximum design value of 75.1 ppb), and Gloucester County New Jersey (maximum design value of 75.8 ppb). The EPA's assessment shows that this control level does resolve the only identified nonattainment or maintenance problem to which North Carolina is linked for this proposal – the Baltimore County Maryland maintenance receptor. The EPA therefore proposes that this EGU control level would fully address North Carolina's good neighbor obligation with respect to the 2008 ozone NAAQS. The EPA seeks comment on this determination.

The EPA also proposes that, based on the information supporting this proposal, this level of EGU NO_X control for North Carolina would not constitute over-control as to the Baltimore County receptor. The level of the 2008 ozone standard NAAQS is 75 ppb. At the uniform $1,300 per ton cost threshold, EPA's assessment demonstrates that the receptor would just be maintaining the standard, with a maximum design value of 75.6 ppb. Therefore, the emissions reductions that would be achieved at the $1,300 per ton cost threshold would not result in air quality improvements at the Baltimore County receptor significantly better than the standard such the emission reductions might constitute over-control as to that receptor. On the contrary, the emission reductions achieved in upwind states at the $1,300 per ton cost threshold are necessary to

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bring the maximum design value at the Baltimore County receptor into alignment with the standard. The EPA also seeks comment on this determination.

For the remainder of the states for which the EPA is proposing FIPs in this action, none of these states are linked solely to one of these maintenance receptors with air quality resolved at the $1,300 per ton cost threshold. Therefore, resolving these downwind air quality impacts does not fully address any other individual upwind state's good neighbor obligation.

As noted above the EPA is proposing that the $1,300 per ton EGU control level would fully address North Carolina's good neighbor obligation with respect to the 2008 ozone NAAQS. As such, based on the data supporting this proposal, North Carolina was excluded from assessment of air quality improvements at more stringent uniform EGU NO_X control levels.

The EPA's assessment shows that the uniform control stringency represented by $3,400 per ton would resolve the maintenance problem at two additional downwind maintenance receptors -- Denton County Texas (481211032)(maximum design value of 75.9 ppb) and Harris County Texas (482011050) (maximum design value of 75.9 ppb). Because no state is linked solely to one of these maintenance receptors, resolving these downwind air

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quality impacts does not fully address any individual upwind state's good neighbor obligation.

The EPA provides this summary of the evaluation for the $500 per ton; $1,300 per ton; and $3,400 per ton uniform cost thresholds because, as described below, the EPA is proposing to use the $1,300 per ton level and is taking comment on using the $500 per ton level or $3,400 per ton level to quantify ozone season EGU NO_X requirements to reduce interstate ozone transport for the 2008 ozone NAAQS. Further information on the EPA's evaluation of these cost thresholds as well as additional cost thresholds ($5,000 per ton; $6,400 per ton; and $10,000 per ton) are provided in the Ozone Transport Policy Analysis Technical Support Document. Additionally, Table VI.D-2 provides a summary of the expected number of nonattainment and maintenance-only receptors at the adjusted base case and cost thresholds.

Table VI.D-2 Number of Nonattainment or Maintenance Receptors after EGU NO_X Mitigation

Cost Threshold	Nonattainment Receptors	Maintenance-Only Receptors
Base Case (IPM 5.15 w/CPP)	12	21
$500 per ton	12	19
$1,300 per ton	12	14
$3,400 per ton	12	13
$5,000 per ton	12	13
$6,400 per ton	12	13
$10,000 per ton	12	12

In *EME Homer City*, the Supreme Court also held that "EPA cannot require a State to reduce its output of pollution . . .

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at odds with the one-percent threshold the Agency has set." 134 S.Ct. at 1608. The Court explained that "EPA cannot demand reductions that would drive an upwind State's contribution to every downwind State to which it is linked below one percent of the relevant NAAQS." *Id.* Accordingly, the EPA also evaluated the potential for over-control with respect to the 1% threshold proposed to be applied in this rule at each relevant cost threshold. Specifically, the EPA evaluated whether the uniform cost thresholds would reduce upwind EGU emissions to a level where the contribution from each upwind state would be below the 1% threshold that linked the upwind state to the downwind receptors. If the EPA found that any state's reduction obligation at the applied cost threshold decreased its contribution to every downwind receptor to which it is linked below the 1% threshold, we would need to adjust the state's reduction obligation accordingly. The EPA's assessment reveals that there is not over-control with respect to the 1% threshold at any of the evaluated uniform costs in any upwind state; in fact, even at the highest uniform cost threshold evaluated (e.g., $10,000 per ton), all upwind states that contributed greater than or equal to the 1% threshold in the base case continued to contribute greater than or equal to 1% of the NAAQS

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to at least one downwind nonattainment or maintenance receptor.[99] Therefore, the EPA does not expect any of the uniform cost thresholds evaluated to result in over-control relative to the 1% threshold. For more information about this assessment, refer to the Ozone Transport Policy Analysis Technical Support Document.

The EPA proposes to determine ozone season EGU NO_X control requirements for upwind states to reduce interstate ozone transport for the 2008 ozone NAAQS based on the reduction potential quantified from pollution control measures that are cost-effective at the $1,300 per ton level. The EPA seeks comment on potentially basing these ozone season NO_X control requirements on uniform cost levels that are less stringent ($500 per ton) or more stringent ($3,400 per ton), including comments on the proposed approach to addressing a state like North Carolina in such a situation, which is explained below..

The EPA notes that the evaluation of cost, NO_X reductions, and ozone improvements for the final rule could show different results for different states. For example, one or more states could fully address their good neighbor obligation based on

[99] As discussed above, North Carolina would not be regulated at any level higher than $1300/ton and at that level, there's no over-control as to the 1% threshold. In fact, while the receptor to which North Carolina is linked resolves its maintenance problem at the $1,300/ton level, North Carolina would continue to contribute equal to or greater than 1% to that air quality monitor.

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ozone season NO_X control requirements represented by one cost level while one or more other states would not fully address their good neighbor obligation at that level and would have ozone season NO_X control requirements based on a more stringent cost level in order to fully address or make further progress toward partially addressing their good neighbor obligation. In this situation, the EPA proposes that it would quantify requirements for these different groups of states based on different uniform control stringencies. This could be similar to EPA's establishing two different SO2 groups under the original CSAPR as to addressing $PM_{2.5}$ transport. The EPA seeks comment on this proposed approach for quantifying requirements.

The EPA also seeks comment on implementation of the resulting emissions budgets. The EPA proposes that if there are groups of states with ozone season NO_X control requirements based on different cost levels, we would nevertheless finalize FIPs for the states in these groups of states that incorporate participation in a trading program that allows them to trade allowances with each other subject to limitations described in section VII of this proposal.

By way of example and as noted above, the EPA is also seeking comment on potentially basing ozone season NO_X control requirements on the $3,400 per ton uniform cost levels. If the

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EPA were to finalize ozone season NO_X control requirements based on this level, given the specific data informing this proposal, then the EPA would set North Carolina's requirements based on the less stringent $1,300 per ton level because, as discussed above, the sole receptor to which North Carolina is linked for this proposal is resolved at the $1,300 per ton level with a maximum design value of 75.6 ppb. Therefore, because the $1,300 per ton level fully addresses North Carolina's good neighbor obligation, if EPA were to determine ozone season NO_X control requirements based on the $3,400 per ton level for the remainder of states, the EPA would finalize good neighbor requirements for these two groups of states using different uniform control stringencies. The EPA proposes that it would finalize FIPs for the states that incorporate participation in a trading program that allows them to trade allowances with each other subject to limitations described in section VII of this proposal.

The EPA's selection of reductions for this rule is specific to, and appropriate for, defining near-term achievable upwind obligations with respect to the 2008 ozone NAAQS in states where a FIP is necessary. We do not intend – nor do we believe we would be justified in doing so in any event – that the cost-level-based determinations in this proposed rule impose a constraint for selection of cost levels in addressing

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transported pollution with respect to future NAAQS and/or any revisions to these FIPs for any other future transport rules that the EPA may develop to address any potential remaining obligation as to the current NAAQS, for which different cost levels may be appropriate.

As described above, the EPA is proposing that the NO_X emission reductions associated with uniform control stringency represented by $1,300 per ton would not result in over-control at any of the identified non-attainment or maintenance receptors and it is reasonable to require such reductions from upwind states.

The EPA requests comment on its proposal to quantify ozone season EGU NO_X reductions to reduce interstate transport with respect to the 2008 ozone NAAQS using the $1,300 per ton uniform cost threshold.

Note that our assessment of EGU NO_X reduction potential shows zero reductions available in Delaware in 2017 at any evaluated cost threshold. At this time, because the assessment shows no EGU NO_X reduction potential within Delaware up to $10,000 per ton and because Delaware does not currently participate in the original CSAPR NO_X ozone-season allowance trading program, the EPA is not proposing to promulgate a FIP for Delaware to be included in this rule. However, as this

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assessment has only considered reductions available at EGUs by 2017, the EPA cannot at this time conclude that Delaware does not have reductions available on a longer timeframe or from other emission sectors. Accordingly, the EPA cannot conclude at this time that Delaware does not significantly contribute to nonattainment or interfere with maintenance at downwind receptors to which it is linked. The EPA will evaluate additional reduction potential from Delaware in a future rulemaking to address the 2008 ozone standard. The EPA seeks comment on not including Delaware in the proposed FIPs.

The EPA's EGU NO_X reduction assessment also shows nearly zero reductions available in Wisconsin in 2017 at the proposed $1,300 per ton cost threshold. However, Wisconsin currently participates in the original CSAPR NO_X ozone-season emissions trading program and Wisconsin's original CSAPR NO_X ozone emissions budget is greater than its projected base case emissions. The EPA proposes to update Wisconsin's emissions budgets because not doing so would mean that Wisconsin, which is found to contribute above 1% to downwind ozone problems, could increase emissions above its base case level. The EPA proposes to determine ozone season NO_X control requirements for Wisconsin to reduce interstate ozone transport for the 2008 ozone NAAQS based on the reduction potential quantified from pollution

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control measures that are cost-effective at the $1,300 per ton level. For Wisconsin, based on modeling for this proposal, this level is similar to its projected base-case level. The EPA seeks comment on the proposed FIP for Wisconsin.

The EPA also requests comment as to whether the EPA should treat Delaware and Wisconsin in the same manner with respect to their inclusion or exclusion from the ozone-season trading program with respect to the 2008 ozone NAAQS. For example, the EPA requests comment as to whether both Delaware and Wisconsin should be included in the ozone-season trading program with budgets on the reduction potential quantified from pollution control measures that are cost-effective at $1,300 per ton,. EPA also requests comment as to whether both states should instead be excluded from the ozone-season trading program.

E. Quantifying State Emissions Budgets

The proposed emissions budgets reflect remaining EGU emissions after upwind states achieve the emission reduction obligations defined in section VI of this proposal.

In the original CSAPR proposal, the EPA set proposed emissions budgets by using an approach that considered monitored state-level heat input and modeled state-level emissions rates. However, for the CSAPR final rule, the EPA set budgets using only the modeling results from CSAPR's uniform cost assessment.

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For this rule, the EPA proposes to set emissions budgets by considering monitored heat input and modeled emissions rates, similar to the original CSAPR proposal. The EPA seeks comment on all aspects of quantifying state emissions budgets reflecting upwind obligations, including alternative metrics to heat input, such as generation

The EPA proposes to quantify state emissions budgets using the minimum of calculated EGU emissions budgets using the state-level EGU NO_X emission rates that correspond to the upwind state reductions identified above using a uniform cost threshold of $1,300 per ton or 2014 monitored historic emissions.

The proposed approach for translating this EGU NO_X reduction potential into emissions budgets is a four step process. First, the EPA would use the resulting 2018 state-level modeled EGU NO_X emissions rate (lbs/mmBtu) from the IPM $1,300 per ton uniform cost assessment. The state-level rate is calculated as the total emissions from affected sources within the state, divided by the total heat input from these sources. Second, the EPA proposes to multiply this modeled state-level emissions rate by 2014 monitored historic state-level heat input. Multiplying the projected state-level emissions rate by historical heat input yields state-specific ozone season EGU NO_X emissions for 2018. Third, the EPA proposes to add an adjustment to account for

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differences in unit availability between the IPM 2018 run year and 2017, yielding state-specific ozone season EGU NO_X emissions for 2017. Finally, the EPA then proposes EGU emissions budgets as the minimum of this calculated 2017 emission level or 2014 historic monitored emissions.

This proposed approach reflects the EGU NO_X reduction potential described above and grounds the EPA's quantification of emissions budgets in historical data. The proposed EGU NOx ozone-season emissions budgets calculated using this approach can be found in Table VI.E-1. Tables VI.E-2 and VI.E-3 provide the EGU NO_X ozone-season emissions budgets reflecting EGU NO_X mitigation available for 2017 at $500 per ton and $3,400 per ton, respectively.

Table VI.E-1. Proposed EGU NO_X Ozone-Season Emissions budgets, Reflecting EGU NO_X mitigation Available for 2017 at $1,300 per ton

State	2014 Emissions (tons)	2018 $1,300/ton Emission Rate (lbs/MMBtu)	2014 Heat Input(MMBtu)	2017 Adjustment (tons)[100]	2017 EGU NOx Ozone-Season Emissions budget (tons)
Alabama	21,075	0.049	410,477,094	0	9,979
Arkansas	18,135	0.074	185,511,093	51	6,949
Illinois	17,520	0.062	388,382,456	9	12,078
Indiana	40,247	0.126	447,417,615	0	28,284
Iowa	13,857	0.11	151,989,571	0	8,351
Kansas	12,297	0.12	154,921,650	0	9,272

[100] The entire 2017 Adjustment listed is not used in calculating for Maryland and Oklahoma because it would push their budget above their 2014 emissions.

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Kentucky	33,896	0.102	380,694,315	2,169	21,519
Louisiana	18,278	0.097	326,662,000	17	15,807
Maryland	4,026	0.05	86,239,563	2,669	4,026
Michigan	25,065	0.112	307,723,171	1,836	19,115
Mississippi	10,229	0.069	172,406,970	0	5,910
Missouri	31,235	0.086	330,006,788	1,210	15,323
New Jersey	2,746	0.036	112,887,439	0	2,015
New York	5,547	0.038	235,619,397	0	4,450
North Carolina	16,759	0.078	315,255,877	0	12,275
Ohio	32,181	0.073	457,251,027	0	16,660
Oklahoma	16,215	0.144	236,715,186	154	16,215
Pennsylvania	44,551	0.057	508,608,673	0	14,387
Tennessee	8,057	0.056	196,132,311	0	5,481
Texas	58,492	0.079	1,474,773,212	33	58,002
Virginia	9,695	0.076	179,324,728	0	6,818
West Virginia	29,420	0.084	317,087,558	0	13,390
Wisconsin	9,087	0.054	205,305,933	0	5,561
23 State Region	478,610		7,581,393,627		311,867

Table VI.E-2. Proposed EGU NO_x Ozone-Season Emissions budgets, Reflecting EGU NO_x mitigation Available for 2017 at $500 per ton

State	2014 Emissions (tons)	2018 $500/ton Emission Rate (lbs/MMBtu)	2014 Heat Input(MMBtu)	2017 Adjustment (tons)[101]	2017 EGU NOx Ozone-Season Emissions budget (tons)
Alabama	21,075	0.058	410,477,094	0	11,886
Arkansas	18,135	0.075	185,511,093	51	7,038
Illinois	17,520	0.062	388,382,456	23	12,144
Indiana	40,247	0.15	447,417,615	0	33,483
Iowa	13,857	0.113	151,989,571	0	8,614
Kansas	12,297	0.12	154,921,650	0	9,278

[101] The entire 2017 Adjustment listed is not used in calculating for Maryland, Oklahoma, and Texas because it would push their budget above their 2014 emissions.

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Kentucky	33,896	0.149	380,694,315	4,463	32,783
Louisiana	18,278	0.097	326,662,000	17	15,861
Maryland	4,026	0.05	86,239,563	2,672	4,026
Michigan	25,065	0.131	307,723,171	1,836	22,022
Mississippi	10,229	0.071	172,406,970	0	6,083
Missouri	31,235	0.086	330,006,788	1,123	15,380
New Jersey	2,746	0.036	112,887,439	0	2,016
New York	5,547	0.039	235,619,397	0	4,607
North Carolina	16,759	0.078	315,255,877	0	12,278
Ohio	32,181	0.088	457,251,027	0	20,194
Oklahoma	16,215	0.156	236,715,186	154	16,215
Pennsylvania	44,551	0.15	508,608,673	0	38,270
Tennessee	8,057	0.056	196,132,311	0	5,520
Texas	58,492	0.083	1,474,773,212	0	58,492
Virginia	9,695	0.078	179,324,728	0	6,955
West Virginia	29,420	0.145	317,087,558	0	22,932
Wisconsin	9,087	0.054	205,305,933	0	5,588
23 State Region	478,610		7,581,393,627		371,665

Table VI.E-3. Proposed EGU NO_x Ozone-Season Emissions budgets, Reflecting EGU NO_x mitigation Available for 2017 at $3,400 per ton

State	2014 Emissions (tons)	2018 $3,400/ton Emission Rate (lbs/MMBtu)	2014 Heat Input(MMBtu)	2017 Adjustment (tons)[102]	2017 EGU NOx Ozone-Season Emissions budget (tons)
Alabama	21,075	0.048	410,477,094	0	9,931
Arkansas	18,135	0.065	185,511,093	51	6,101
Illinois	17,520	0.062	388,382,456	0	11,992
Indiana	40,247	0.123	447,417,615	0	27,585
Iowa	13,857	0.107	151,989,571	0	8,118

[102] The entire 2017 Adjustment listed is not used in calculating for Maryland and Oklahoma because it would push their budget above their 2014 emissions.

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Kansas	12,297	0.12	154,921,650	0	9,259
Kentucky	33,896	0.099	380,694,315	2,169	20,945
Louisiana	18,278	0.094	326,662,000	17	15,378
Maryland	4,026	0.05	86,239,563	2,523	4,026
Michigan	25,065	0.108	307,723,171	1,978	18,624
Mississippi	10,229	0.064	172,406,970	0	5,487
Missouri	31,235	0.083	330,006,788	1,500	15,240
New Jersey	2,746	0.036	112,887,439	0	2,011
New York	5,547	0.037	235,619,397	0	4,391
North Carolina	16,759	0.068	315,255,877	0	10,705
Ohio	32,181	0.073	457,251,027	0	16,637
Oklahoma	16,215	0.137	236,715,186	146	16,215
Pennsylvania	44,551	0.056	508,608,673	0	14,358
Tennessee	8,057	0.056	196,132,311	0	5,449
Texas	58,492	0.076	1,474,773,212	100	55,864
Virginia	9,695	0.065	179,324,728	0	5,834
West Virginia	29,420	0.078	317,087,558	0	12,367
Wisconsin	9,087	0.054	205,305,933	0	5,511
23 State Region	478,610		7,581,393,627		302,028

VII. **Implementation Using the Existing CSAPR NO_X Ozone-Season Allowance Trading Program and Relationship to Other Rules**

A. Background

This section describes implementing and enforcing the budgets quantified in section VI. In the 4-step CSAPR methodology previously described, once emission reduction potential is quantified into emissions budgets, the remaining step is to identify an approach for ensuring that such

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reductions occur and are enforceable. As discussed previously, EPA is proposing implement the budgets to address the 2008 ozone NAAQS using the existing CSAPR trading program that allows limited interstate trading among states participating in the ozone-season trading program. The EPA proposes to revise the existing budgets, developed to address transport as to the 1997 ozone NAAQS, where necessary to reflect the additional reductions that the EPA identified as necessary to address transport as to the 2008 NAAQS. The EPA will implement the trading program in each affected state through the issuance of a FIP.

In electing to propose to implement these near-term EGU reductions for the 2008 ozone standard using the existing CSAPR trading infrastructure, the EPA considered the many significant advantages of continuing to use the existing CSAPR program, including the ease of transition to the new budgets, the economic and administrative efficiency of trading approaches, and the flexibility afforded to sources regarding compliance.

The EPA also considered views expressed by some stakeholders that a complementary short-term (e.g., 30-day) rate-based limit would ensure that control measures adopted to meet the revised budgets continue to operate over time. Some stakeholders have observed, for example, that some existing SCR

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and SNCR units may not have operated in recent years because CAIR allowance prices are below the operating costs of the controls. The EPA notes that in such cases, the CAIR emissions budgets that states were required to meet to address significant contribution for the 1997 NAAQS were in fact still being met. The EPA will also evaluate power sector behavior for 2015, the first year of CSAPR implementation, and provide that assessment for the final rule. The EPA expects that certain aspects of this proposal will alleviate some of these concerns. In particular, this proposal is aimed at establishing new, lower emissions budgets that are calculated based on a uniform cost that is reflective of, among other things, operating those controls. Furthermore, as described later in this notice, we are proposing adjustments to the CSAPR regulations that, if adopted, would address the role that the banked allowances may play in allowance prices. For these reasons, the EPA does not believe that including a short-term complementary rate-based limit in the proposed FIPs is necessary. Nevertheless, we invite comment on the need for such an approach and, from commenters arguing that it is needed, we invite suggestions for calculating it.

As explained in greater detail in section IV, under CAA sections 110(a)(1) and 110(a)(2), each state is required to submit a SIP that provides for the implementation, maintenance,

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and enforcement of each primary or secondary NAAQS. According to section 110(a)(2)(D)(i)(I), the SIP for each state, regardless of a state's designation status for the relevant NAAQS, must prohibit sources or other types of emissions activity from emitting any air pollutant in amounts that will "contribute significantly to nonattainment" of the standard in a downwind state or "interfere with maintenance" of the standard in a downwind state. Section IV also explains in detail that the EPA is obligated to promulgate FIPs when we find that a state fails to submit a complete SIP or the EPA disapproves a SIP submittal.

The EPA recognizes that several states included in this proposal have submitted transport SIPs to address the 2008 ozone standard that the EPA is reviewing, and it is possible that additional states may submit SIPs in the future. As explained in section IV above, the EPA may only finalize FIPs for states where FIP authority exists; that is, for states where either the EPA found that the state failed to submit a complete transport SIP or where the EPA has disapproved a transport SIP submittal for that state. The EPA intends to finalize these proposed FIPs together in a single action and, to the greatest extent possible, the EPA intends to take final action on SIP submittals currently before the agency prior to finalizing this proposal. In the event that a state plans to revise its SIP or submit a

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SIP prior to any final rule, contact your regional office to alert the EPA.

By this action, the EPA is proposing federal implementation plans with respect to the 2008 ozone NAAQS for each state potentially covered by this rule. Section VI above describes the EPA's approach to defining state-level EGU emissions budgets that represent the EGU emissions remaining after reducing that state's significant contribution to downwind nonattainment and/or interference with maintenance. The EPA is proposing to implement these EGU emissions budgets in the FIPs through the CSAPR EGU NO_X ozone-season trading program.

When the EPA finalized CSAPR in 2011 under the good neighbor provision of the CAA to reduce emissions of SO_2 and NO_X from power plants in eastern states, the rule put in place regional trading programs to quickly and cost-effectively address pollution that affects air quality in downwind states. The EPA envisioned that the methodology could be used to address transport concerns under other existing NAAQS and future NAAQS revisions. See 76 FR 48211 and 48246, August 8, 2011. Accordingly, the EPA proposes to use the CSAPR ozone-season trading program and related provisions as codified under 40 CFR Part 97, Subpart BBBBB and section 52.38, as amended in this proposal, to implement the proposed EGU NO_X ozone-season

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emissions budgets for the 2008 ozone NAAQS. This program will be initially implemented in each state through a FIP.

In this notice, the EPA proposes that the first control period for the requirements is the 2017 ozone season. A covered state would be required to demonstrate compliance with FIP requirements for each subsequent ozone season until it submits, and the EPA approves, a SIP or the EPA promulgates another federal rule replacing the FIP.

The EPA notes that the compliance flexibility provided by the CSAPR NO_X ozone-season trading program allows sources to demonstrate compliance by holding allowances and does not prescribe unit-specific and technology-specific NO_X mitigation. In other words, while the EPA quantified EGU NO_X reductions resulting from mitigation strategies such as operating or installing (or upgrading to) state-of-the-art combustion controls, no particular reduction strategy is required for any specific unit because the Act only requires that an upwind state's aggregate emissions neither significantly contribute to nonattainment nor interfere with maintenance of the NAAQS in a downwind state.

In practice, the EGU emissions budgets that the EPA is proposing in this action are achievable for each of the 23 states through operating existing SCR and SNCR controls,

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installing or upgrading to state-of-the-art combustion controls, or shifting generation to low-NO_X emitting units. The EPA believes that this proposed rule provides sufficient lead time to implement these control strategies by the 2017 ozone season. For the EPA's assessment of the feasibility of controls for 2017, refer to section VI above and the EGU NO_X Reduction TSD in the docket for this proposal.[103]

In this section of the preamble, the following topics are addressed: FIP requirements and key elements of the CSAPR trading programs; participation in the CSAPR NO_X ozone-season trading program with a new budget; source monitoring and reporting; replacing the FIP with a SIP; title V permitting; and the relationship of this proposed rule to existing programs (NO_X SIP Call, CSAPR trading programs, Clean Power Plan (CPP), and other ozone transport programs).

B. FIP Requirements and Key Elements of the CSAPR Trading Programs

The original CSAPR establishes an NO_X ozone-season allowance trading program that allows covered sources within each state to trade allowances with other sources within the same trading group. Pursuant to the CSAPR NO_X ozone-season trading program, sources are required to hold one allowance for each ton of NO_X

[103] The EPA notes that a state can instead require non-EGU NO_X emission reductions through a SIP, if they choose to do so.

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emitted during the ozone season. We propose to use that same regional trading program, with adjusted budgets and certain additional revisions described below, as the compliance remedy for the proposed FIPs to address the 2008 ozone NAAQS. The first control period for this updated CSAPR NO_X ozone-season trading program is proposed to begin with the 2017 ozone season, on May 1, 2017.

In this section, the EPA is proposing to use the existing NO_X ozone-season allowance trading system that was established under CSAPR in 40 CFR Part 97, Subpart BBBBB, to implement the emission reductions identified and quantified in the FIPs for this action.

1. Applicability

In this proposed rule, the EPA would maintain the applicability provisions in the final CSAPR rule for the NO_X ozone-season trading program (see 40 CFR 97.504).

Under the general applicability provisions of the CSAPR final rule, a covered unit is any stationary fossil-fuel-fired boiler or combustion turbine serving at any time on or after January 1, 2005, a generator with nameplate capacity exceeding 25 MW producing electricity for sale, with the exception of certain cogeneration units and solid waste incineration units (see 76 FR 48273, August 8, 2011, for a discussion on

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applicability in the final CSAPR rule). The EPA is not proposing any changes to this provision.

2. State Budgets

This proposal includes revisions to 40 CFR Part 97.510 to reflect new budgets for states covered under this proposal as delineated in section VI above. This includes the NO_X ozone-season trading budgets, new unit set-asides, and Indian country new unit set-asides for 2017 and beyond, described in further detail below.

For states already covered by the original CSAPR ozone-season program, the EPA proposes to update CSAPR EGU NO_X ozone-season budgets to reflect obligations to reduce interstate transport to address the 2008 ozone standard. For states that are newly brought into the CSAPR ozone-season program because emissions from the states significantly contribute to nonattainment or interfere with maintenance of the 2008 ozone NAAQS in a downwind state (i.e., Kansas based on information used to develop this proposal), the proposal includes an EGU NO_X ozone-season emissions budget. For states currently in the CSAPR ozone-season trading program, but not identified as contributing to interstate ozone transport for the 2008 NAAQS (i.e., Georgia based on information used to develop this proposal), participation in CSAPR would continue unchanged pursuant to

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their previously-defined obligation (budget) with respect to the 1997 ozone NAAQS.

The EPA proposes to establish reduced or new ozone-season emissions budgets for the 23 eastern states affected by the transport rule for the 2008 ozone NAAQS. The EPA proposes to implement these emissions budgets by allocating allowances to sources in those states equal to the proposed budgets for compliance starting in 2017. The EPA will establish allowance allocations for the existing units in each state through this rulemaking. Portions of the state budgets will be set aside for new units, and the EPA will use the existing processes set forth in the CSAPR regulations to annually allocate allowances to the new units in each state from the new unit set-asides. For states that are currently in the CSAPR ozone-season program, but are not affected under this proposed transport rule for the 2008 ozone NAAQS (i.e., Georgia based on information used to develop this proposal), the EPA will maintain the state's budget as finalized in the original CSAPR rulemakings.

3. Allocations of Emission Allowances

Pursuant to the CSAPR trading program regulations, a covered source is required to hold sufficient allowances to cover the emissions from all covered units at the source during the control period for the NO_X ozone season. The EPA assesses

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compliance with these allowance-holding requirements at the source (i.e., facility) level.

This section explains that the EPA proposes to allocate a state's budget to existing units and new units in that state by applying the same allocation approach as finalized in CSAPR, based on a unit's historical heat input and its maximum historical emissions (see 76 FR 48284, August 8, 2011). This section also describes allocation for Tribes, the new unit set-asides and Indian country new unit set-asides in each state, allocations to units that are not operating; and the recordation of allowance allocations in source compliance accounts.

A. Allocations for Existing Units

The EPA proposes to implement each state's EGU NO_X ozone-season emissions budget in the trading program by allocating the number of emission allowances to sources within that state, equivalent to the tonnage of that specific state budget, as shown in section VI. For these 23 states, the EPA would allocate allowances under each state's budget to covered units in that state. The portion of a state budget allocated to existing units in that state is the state budget minus the new unit set-aside and minus the Indian country new unit set-aside. The new unit set-asides are portions of each budget reserved for new units that might locate in each state or in Indian country in the

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future. For the existing source level allocations, see the TSD called, "Existing Source Level Allocations for the 2008 NO_X Ozone-season Rule FIPs," in the docket for this rulemaking. The methodology used to allocate allowances to individual units in a particular state has no impact on that state's budget.

For the purpose of allocations, an "existing unit" in CSAPR is one that commenced commercial operation prior to January 1, 2010. For the 23 states included in this proposed rulemaking for the 2008 ozone NAAQS, the EPA proposes to identify an "existing unit" as one that commenced commercial operation prior to January 1, 2015. EPA has updated information on affected units that have commenced commercial operation prior to January 1, 2015 (currently defined either as existing units or as new units pursuant to the current CSAPR regulations) that would allow these units to be considered existing units for purposes of allocations and would allow new unit set-asides to be fully reserved for any future new units in affected states or Indian country. The EPA is not proposing to change the January 1, 2010 date for states that remain in the original CSAPR and are not affected by the changes proposed here (i.e., Georgia with respect to the CSAPR NO_X ozone-season allowances and all states with respect to CSAPR SO_2 or NO_X annual allowances); thus, the only allowance allocations that are proposed to be changed in

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this rule for any units under any of the CSAPR trading programs are allocations of NO_X ozone-season allowances from budgets that are proposed to be revised in this rule.

The EPA proposes to follow the original CSAPR methodology for distributing, or allocating, emission allowances to existing units based on the unit's share of the state's heat input, limited by the unit's maximum historical emissions. This approach uses the highest three of the last five years to establish the heat input baseline for each unit, and constrains the unit-level allocations so as not to exceed the maximum historical baseline emissions during 2007-2014. As discussed in the original CSAPR final rule (*see* 76 FR 48288-9, August 8, 2011), the EPA finds no advantage or disadvantage in this approach that would penalize those units that have already invested in cleaner fuels or other pollution reduction measures. The EPA considers this allocation approach to be fuel-neutral, control-neutral, transparent, based on reliable data, and similar to allocation methodologies previously used in the NO_X SIP Call and Acid Rain Program. The EPA requests comments on following the CSAPR approach for existing unit allocations in states covered by this proposed rule as to the 2008 ozone NAAQS.

For states that have EPA-approved abbreviated SIP revisions adopting a different allocation methodology for sources located

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within the state for CSAPR for the 2017 ozone season and beyond, those provisions would address the allocation of revised NO_X ozone-season emissions budgets established under this rule, provided that the SIP revision includes not only specific allocations given the total state budget expected at the time of the SIP revision, but also a methodology for determining allocations from any given total state budget. For states that have EPA-approved full SIP revisions, the EPA proposes to use the EPA-approved allocation provisions of the state's SIP revision to allocate allowances to sources in that particular state using the revised emissions budget proposed to address interstate ozone transport for the 2008 NAAQS, again provided that the SIP includes not only specific allocations but a methodology for determining allocations from any given total state budget.

Further, where the state regulation approved as a full or abbreviated SIP revision does not contain an allocation methodology but the materials submitted by the state to support EPA's approval of that regulation as a SIP revision contain the state's allocation method, described in an unambiguous manner, the EPA seeks comment on using that state-approved methodology to determine the allocations of allowances to sources in the state under the FIPs established in this rule. These possible

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approaches could prevent a state from needing to submit another SIP revision to implement the same allocation provisions under this rule that the state has already implemented under CSAPR before adoption of this rule.

For all other states, the EPA proposes to use the allocation method previously finalized in the final CSAPR rulemaking as discussed above in this section. These provisions would not prevent any state (one with an EPA-approved SIP revision or without) from submitting an alternative allocation methodology under the rule for later compliance years. EPA requests comment on this modified allocation approach for states with EPA-approved SIP revisions under the current rule.

b. Allocations for New Units

For the purpose of allocations, CSAPR identifies a "new unit" as one that commenced commercial operation on or after January 1, 2010, and provides a methodology for allocating emission allowances to new units from new unit set-asides in each state and to new units that locate in Indian country. See 76 FR 48290-48294 (Aug. 8, 2011), for more information. The FIPs that EPA is proposing will incorporate a trading program in which EPA is proposing to define a covered unit as a "new unit" if it commences commercial operation on or after January 1, 2015; if it becomes covered by meeting applicability criteria

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subsequent to January 1, 2015; if it relocates into a different state covered by this FIP; or if it was an "existing" covered unit that stopped operating for 2 consecutive years but resumes commercial operation at some point thereafter. To the extent that states seek approval of SIPs with different allocation provisions than EPA, these SIPs may seek to define new units differently.

The EPA further proposes that its trading program will make allocations to each state for new units (the new unit set-aside) equal to a basic minimum 2 percent of the total state budget, plus the projected amount of emissions from planned units in that state (for instance, if planned units in state A are projected to emit 3 percent of the state's NO_X ozone-season emissions budget, then the new unit set-aside for the state would be set at 5 percent, consisting of the basic minimum 2 percent plus an additional 3 percent for planned units). See 76 FR 48292. New units may receive allocations starting with the first year they are subject to the allowance-holding requirements of the rule. If unallocated to new units, set-asides are redistributed to unretired existing units before the compliance deadline. The EPA requests comments on following the CSAPR approach for new unit allocations under this proposal.

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(For more detail on the CSAPR new unit set-aside provisions, see 40 CFR 97.511(b) and 97.512.)

The EPA notes that applying the CSAPR approach using the data for this proposal results in a new-unit set-aside for New Jersey that is greater than 50% of the total proposed EGU NO_X ozone-season emissions budget for the state. This result is influenced by the EPA's projected emissions rates for new units that are anticipated to come online within states. The EPA seeks comment on these data, which are available in the IPM documentation in the docket for this proposal. Further, the EPA seeks comment on whether additional data should be considered—for example, reported NO_X emission rates of recently constructed new NGCC units in each state.

Table VII.B-1. Proposed EGU NO_X Ozone-Season New-unit Set-aside Amounts, Reflecting Proposed EGU Emissions Budgets (tons)

State	Proposed EGU NO_X Emissions Budgets (tons)	New-unit set-aside amount (percent)	New-unit set-aside amount (tons)	Indian country set-aside amount (tons)
Alabama	9,979	2%	205	
Arkansas	6,949	2%	141	
Illinois	12,078	5%	591	
Indiana	28,284	2%	565	
Iowa	8,351	5%	419	8
Kansas	9,272	3%	281	9
Kentucky	21,519	3%	647	
Louisiana	15,807	4%	628	16
Maryland	4,026	12%	485	
Michigan	19,115	2%	382	19
Mississippi	5,910	10%	590	6
Missouri	15,323	2%	314	
New Jersey	2,015	57%	1,151	

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New York	4,450	2%	93	4
North Carolina	12,275	2%	248	12
Ohio	16,660	2%	337	
Oklahoma	16,215	2%	325	16
Pennsylvania	14,387	7%	1,017	
Tennessee	5,481	2%	109	
Texas	58,002	5%	2,910	58
Virginia	6,818	27%	1,844	
West Virginia	13,390	2%	268	
Wisconsin	5,561	2%	121	6
23 State Region	311,867		13,671	154

c. Allocations for Tribes and New Units in Indian Country

Tribes are not required to submit tribal implementation plans. However, as explained in the EPA's regulations outlining Tribal Clean Air Act authority, the EPA is authorized to promulgate FIPs for Indian country as necessary or appropriate to protect air quality if a tribe does not submit and get EPA approval of a tribal implementation plan. *See* 40 CFR 49.11(a); see also 42 U.S.C. 7601(d)(4). For this proposed ozone rule, there are no existing affected units in Indian country in the states affected by this rule.

Under the current rule, allowances to possible future new units locating in Indian country are allocated by the EPA from an Indian country new unit set-aside established for each state with Indian country. (See 40 CFR 97.511(b)(2) and 97.512(b).) Because states generally have no SIP authority in reservation areas of Indian country and other areas of Indian country over

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which a tribe or EPA has demonstrated that a tribe has jurisdiction, the EPA continues to allocate such allowances to sources locating in such areas of Indian country within a state even if the state submits a SIP to replace the FIP. (40 CFR 52.38(b)(5)(v) and (vi) and 52.38(b)(6).) The EPA reserves 0.1 percent of the total state budget for new units in Indian country within that state (5 percent of the basic 2 percent new unit set-aside prior to any increase in a state's new unit set-aside amount for planned units). Unallocated allowances from a state's Indian country new unit set-aside are returned to the state's new unit set-aside and allocated according to the methodology described above. The EPA requests comment on following the CSAPR approach for new unit allocations in such areas of Indian country under the transport rule for the 2008 ozone NAAQS.

d. Units that do not operate and the new unit set-aside

The EPA proposes to continue to apply for purposes of this rule the existing CSAPR provision under which a covered unit that does not operate for a period of two consecutive years will receive allowance allocations for a total of up to five years of non-operation. 40 CFR 97.511(a)(2). Starting in the fifth year after the first year of non-operation, allowances allocated to such units will instead be allocated to the new unit set-aside

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for the state in which the non-operating unit is located. This approach allows the new unit set-asides to grow over time. The EPA requests comment on retaining this timeline for allowance allocation for non-operating units or changing the allowance allocation for non-operating units to, for instance, two years or three years, in which case allowances would revert to the new unit set-aside in the second or third year after the first of two consecutive years of non-operation of a unit.

4. Variability Limits, Assurance Levels, and Penalties

In the original CSAPR, the EPA developed assurance provisions, including variability limits and assurance levels (with associated compliance penalties), to assure that each state will meet its pollution control obligations and to accommodate inherent year-to-year variability in state-level EGU operations.

The original CSAPR budgets, and the updated CSAPR emissions budgets proposed in this notice, reflect EGU operations in an "average year." However, year-to-year variability in EGU operations occurs due to the interconnected nature of the power sector and from changing weather patterns, demand growth, or disruptions in electricity supply from other units or from the transmission grid. Recognizing this, the FIP includes variability limits, which define the amount by which state

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emissions may exceed the level of the budgets in a given year to account for this variability in EGU operations. A state's budget plus its variability limit equals a state's assurance level, which acts as a cap on each state's NO_X emissions during a control period (that is, during the May-September ozone season in the case of this rule).

To establish the variability limits in the original CSAPR, the EPA analyzed historical state-level heat input variability as a proxy for emissions variability, assuming constant emission rates. (See 76 FR 48265, August 8, 2011.) The variability limits for ozone-season NO_X in the original CSAPR were calculated as 21 percent of each state's budget, and these variability limits were then codified in 40 CFR 97.510 along with the state budgets. Applying the CSAPR approach, the EPA proposes to set new variability limits applying the same 21 percent figure as determined in the original CSAPR to this rule's budgets. The EPA proposes that the same 21% figure is appropriate to use because variability in state-level heat input across a multi-year period is expected to be relatively consistent around long-term trends. The EPA seeks comment on this approach. Table VII.B-2 shows the proposed EGU NO_X ozone-season emissions budgets, variability limits, and assurance levels for each state.

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Table VII.B-2. Proposed EGU NO_X Ozone-Season Emissions budgets Reflecting EGU NO_X mitigation Available for 2017 at $1,300 per ton, Variability Limits, and Assurance Levels (Tons)

State	EGU NOx Ozone-Season Emissions budgets	Variability Limits	EGU NOx Ozone-Season Assurance Levels
Alabama	9,979	2,096	12,075
Arkansas	6,949	1,459	8,408
Illinois	12,078	2,536	14,614
Indiana	28,284	5,940	34,224
Iowa	8,351	1,754	10,105
Kansas	9,272	1,947	11,219
Kentucky	21,519	4,519	26,038
Louisiana	15,807	3,319	19,126
Maryland	4,026	845	4,871
Michigan	19,115	4,014	23,129
Mississippi	5,910	1,241	7,151
Missouri	15,323	3,218	18,541
New Jersey	2,015	423	2,438
New York	4,450	935	5,385
North Carolina	12,275	2,578	14,853
Ohio	16,660	3,499	20,159
Oklahoma	16,215	3,405	19,620
Pennsylvania	14,387	3,021	17,408
Tennessee	5,481	1,151	6,632
Texas	58,002	12,180	70,182
Virginia	6,818	1,432	8,250
West Virginia	13,390	2,812	16,202
Wisconsin	5,561	1,168	6,729
Region cap	311,867	65,493	

The assurance provisions include penalties that are triggered when the state emissions as a whole exceed its assurance level. The original CSAPR provided that a state that exceeds its assurance level in a given year is assessed a total of 3-to-1 allowance surrender on the excess tons. Each excess

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ton above the assurance level must be met with one allowance for normal compliance plus two additional allowances to satisfy the penalty. The penalty is designed to deter state-level emissions from exceeding assurance levels. This was referred to in the original CSAPR as air quality-assured trading that accounts for variability in the electricity sector but also ensures that the necessary emission reductions occur within each covered state. If a state does not exceed its assurance level, no penalties are incurred by any source. Establishing assurance levels with compliance penalties therefore responds to the court's holding in *North Carolina* requiring the EPA to assure that sources in each state were required to eliminate emissions that significantly contribute to nonattainment and interfere with maintenance of the NAAQS in another state.[104]

To assess the penalty under the assurance provisions, the EPA evaluates whether any state's total EGU emissions in a control period exceeded the state's assurance level, and if so, the EPA then determines which owners and operators of units in the state will be subject to an allowance surrender requirement based on each source's emissions as compared to its unit-level assurance level. Since a single designated representative (DR) often represents multiple sources, the EPA evaluates which

[104] 531 F.3d at 908.

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groups of units at the common DR level had emissions exceeding the respective common DR's share of the state assurance level, regardless of whether the individual source had enough allowances to cover its emissions during the control period. This provision is triggered only if two criteria are met: (1) the group of sources and units with a common DR are located in a state where the total state EGU emissions for a control period exceed the state assurance level; and (2) that group with the common DR had emissions exceeding the respective DR's share of the state assurance level.

For more information on the CSAPR assurance provisions see 76 FR 48294 (August 8, 2011).

5. Implementation Approaches for Transitioning the Existing CSAPR NO_X Ozone-season Program to Address Transport for a Newer NAAQS

Consistent with the original CSAPR approach, EPA proposes that in this updated rulemaking, EGUs would be able to trade NO_X ozone-season emission allowances among units within the state and across state boundaries, with emissions and use of allowances limited by the assurance provisions. The following sections describe approaches to transition the existing CSAPR program designed for the 1997 ozone NAAQS to address interstate ozone transport for the 2008 ozone NAAQS.

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A primary focus of this section is the extent to which allowances created to address interstate transport with respect to the 1997 ozone NAAQS, reflecting emissions budgets at $500 per ton, are fungible with allowances created under this proposal to address interstate transport for the 2008 ozone NAAQS, reflecting emissions budgets at $1,300 per ton. The EPA proposes that these implementation tools are not presumptively equivalent, given that they were developed to address ozone transport under different NAAQS and using different cost thresholds. However, as further discussed below, the EPA is proposing approaches under which allowances allocated under budgets established to address the 1997 NAAQS could be used for compliance for addressing interstate transport for the 2008 NAAQS, subject to specific limitations. The EPA is also taking comment on several other approaches for addressing the transition from a program in which all budgets were established based on an integrated analysis using a single control cost threshold to address the 1997 NAAQS to a program with a mix of budgets established in independent analyses using different control cost thresholds, in some cases to address the 1997 NAAQS and in other cases to address the 2008 NAAQS.

a. *Use of CSAPR Ozone-season Trading Program Bank in the Transport Rule for the 2008 Ozone NAAQS Trading Program*

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Since CSAPR was promulgated in 2011, the U.S. electric sector has undergone considerable transformation primarily due to economic and market forces precipitated by the natural gas boom. For example, Henry Hub natural gas prices reached below $2.00 per million BTU in 2012 and were in the $2.00-$3.00 range for most of 2012. These prices are below the level initially anticipated when establishing the phase 1 and 2 budgets, and have made the operation of lower emitting units more competitive, putting more downward pressure on emissions. There has also been turnover in the power generation fleet as newer, lower emitting sources replace older, higher emitting sources, putting further downward pressure on emissions. Approximately 28.5 GW of coal units retired from the fleet between 2012 and June of 2015. In addition, demand growth has slowed; a majority of U.S. states have implemented renewable portfolio standards and other energy efficiency programs; and high-efficiency building designs, residential energy conservation, roof-top solar, and other forms of distributed generation have grown. In combination, these factors have significantly reduced EGU NO_X emissions between 2012 and 2015.

As a result of protracted litigation, CSAPR implementation was delayed by three years, from 2012 to 2015. Due to this delay, combined with the market forces and changes that took

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place during that timeframe, expectations are that total banked allowances for the CSAPR ozone-season trading program could be in excess of 210,000 tons by the start of the 2017 ozone-season compliance period, which is more than twice the emission reduction potential estimated at the $1,300 per ton control level described in section VI above. This number was estimated by comparing recent measured emission levels to the original CSAPR NO_X ozone-season phase 1 emissions budgets, assuming EGU emissions in CSAPR NO_X ozone-season states for 2015 and 2016 would continue at 2014 levels.[105]

The use of allowance banks generally provide a glide path for sources required to meet more stringent emission limits in later years and accommodate year-to-year variability in operation. However, allowing unrestricted use of the large number of banked allowances for compliance with this new rule could result in regional 2017 ozone season NO_X emissions that exceed the collective state budgets quantified in this rule to address transported air pollution with respect to the 2008 ozone standard. While the assurance provisions included in CSAPR do limit the ultimate amount of pollution that may occur in these states in 2017 (i.e., no matter how large an allowance bank may

[105] This data analysis relies on 40 CFR Part 75 emissions reporting data as available in EPA Air Markets Program Data available at http://ampd.epa.gov/ampd/

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exist, only a portion of that bank may be used in a state in any given year without exceeding the assurance levels and incurring penalties), unrestricted use of the bank in this situation could allow emissions to exceed the state budgets, up to the assurance level, year after year.

As described in CSAPR, the flexibility provided by the assurance provisions is not designed to be used repeatedly, year after year. Rather, the use of banked allowances is intended to be limited by binding emissions budgets such that drawing down the bank in one year is only possible because of actions taken to build up the bank in a previous year. Moreover, a relatively large allowance bank that enables emissions budgets to be exceeded year after year may encourage sources to postpone emission reductions that would be more timely in the 2017 timeframe in order to align reductions with the downwind area attainment dates for the 2008 ozone NAAQS.

The EPA is proposing and taking comment on a range of options for how to treat the use of banked 2015 and 2016 CSAPR NO_X ozone-season allowances by units in the 23 states with new or updated budgets in this proposal. The use of banked allowances by states that are not included in the proposed FIPs to address ozone transport under the 2008 NAAQS (i.e., Georgia for CSAPR NO_X

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ozone-season program and all states for CSAPR SO_2 and NO_X annual programs) would not be affected by these options.

The EPA is proposing that allowances issued for compliance in 2015 and 2016 under CSAPR may be used for compliance under the updated CSAPR from 2017 forward in order to smooth implementation in the first few years under the new budgets. However, the EPA is proposing to impose certain limits on the use of these banked allowances starting in 2017. Specifically, the EPA is proposing that sources in the 23 states with new or updated budgets in this proposal may use all of their banked allowances, but at a tonnage authorization level significantly lower than one ton per allowance. This would be realized through a surrender ratio greater than one pre-2017 allowances (vintage 2015 or 2016) to cover one ton of NO_X emitted in 2017 and each year thereafter. The surrender ratio, such as four-for-one or two-for-one, would require more than one pre-2017 banked allowance to be used for each ton of ozone season NOx emitted in 2017 and beyond. This would have the dual effect of carrying over the banked allowances into the new program to promote program continuity, while also recognizing the environmental objectives of the updated ozone NAAQS for 2008 and the corresponding new state emission budgets designed to help move air quality towards compliance with that NAAQS standard. A

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surrender ratio would respect the flexibility of sources to operate at their assurance levels in the program's early years, but would reduce the ability for the collective EGU fleet to repeatedly exceed the emissions budget year after year.

Finally, EPA believes a surrender ratio is appropriate as it reflects the fact that tighter budgets will put upward pressure on allowance value in the future. Therefore, fewer allowances will be needed to reach the same value of a current allowance holding, making a surrender ratio a natural complement to carrying over the value of the banked allowances in a program where more stringent emission budgets are replacing less stringent emission budgets.

EPA is proposing a surrender ratio greater than one-for-one, such as two-for-one or four-for-one. For analytic purposes in this rulemaking, it reflects the four-for-one surrender ratio to illustrate one potential surrender ratio. However, in the final rule, EPA would update this assumption to reflect the surrender ratio finalized.

This ratio of four or two banked allowances to one ton of emissions is derived from the ratio of the anticipated allowance bank in 2017 (approximately 210,000 allowances) to the ozone season variability limit (i.e., the difference between the sum of the emissions budgets for all 23 states and the sum of the

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assurance levels for all 23 states; approximately 60,000 tons) or the ozone season variability limit multiplied by two (120,000 tons), rounded to the nearest whole number. The EPA identified this approach to limit the emissions impact of using banked allowances to the magnitude of all states emitting up to their assurance levels for one or two years. The variability limit respects the upper bound variation in emissions and load EPA would expect in any given year. Thus, the carryover of banked allowances equal to one or two years' worth of variability limits provides the affected fleet with the ability to accommodate potential variation from the mean in its load and emission patterns in the first years of the program, while balancing the need to ensure that emissions are reduced, on average, to the level of the budgets and within the assurance levels in subsequent years.

The EPA believes that a surrender ratio approach provides a means for the existing CSAPR EGU NO_X ozone-season allowances to retain some value, while appropriately mitigating the potential adverse impact of the allowance bank on the emission-reducing actions needed from affected units in states with obligations to address interstate transport for the 2008 ozone NAAQS. The EPA seeks comment on a surrender ratio approach and on the use of a

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ratio, such as two-for-one or four-for-one, and whether an alternative ratio would be appropriate.

The EPA is also soliciting comment on another approach that we believe could achieve these same goals (i.e., valuing the anticipated CSAPR allowance bank while promoting near-term emission reductions). Under this alternative approach, the EPA would issue fewer allowances than the tons quantified in state budgets for the 23 states affected by this rulemaking in the first three years of program implementation (i.e. 2017, 2018, and 2019). This approach recognizes that 2015 and 2016 allowances are available to sources for compliance and would allow use of those banked CSAPR NO_X ozone allowances at a one-to-one turn-in ratio (i.e., one allowance is surrendered for one ton of emissions). By reducing overall allocations for a period of time, the impact of states using those banked allowances on emission levels would be mitigated.

The EPA seeks comment on what percentage (below 100 percent) of allowances to issue, and over what number of years, under this alternative approach. As a specific example, the EPA seeks comment on implementing this approach in a manner such that the EPA would issue allowances to sources within each of the 23 states with updated budgets under this proposal at a level of 85 percent of the proposed emissions budgets for the

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first three years that the new budgets are effective. Using the proposed EGU NO_X ozone-season emissions budget of 9,979 tons for Alabama as an example, this would mean issuing approximately 8,482 allowances for each of the 2017 through 2019 (inclusive) control periods (and the full budget for each subsequent control period). Applying this approach to all 23 states with updated budgets under this proposal (which sum to 312,824 allowances) would mean that EPA would issue approximately 266,900 allowances across those states in each of the 2017, 2018, and 2019 control periods. EGUs in those states would be able to use allowances from the anticipated 210,000 allowance bank in addition to allowances issued for these years in order to comply with the updated CSAPR emission requirements. Allocating approximately 266,900 allowances for the first three years of the updated requirements would, based on current estimates, result in approximately 47,000 banked allowances used for compliance each year. This would leave approximately 70,000 banked allowances, which is roughly equivalent to the regional variability limit (i.e., the difference between the states' collective emissions budgets and their collective assurance levels). As under the illustrative four-for-one surrender ratio option, the remaining amount of banked allowances that would remain after using this initial reduced allocation is approximately the amount of banked

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allowances that would allow all states to emit up to their assurance levels for one year.

The EPA also seeks comment on what other percentages of the budget and time-frames could be appropriately used to implement this alternative approach. As in the specific example above, the EPA would seek a combination of time and recordation percentage such that the ultimate influence of the anticipated allowance bank is limited to approximately the regional variability limit (i.e., the difference between the collective emissions budgets and the collective assurance levels).

Under either approach, the EPA would conduct unit-level allowance allocations in the same manner as described above, such that each unit's share of its state's total allowances issued is determined by that allocation approach whether the EPA issues allowances in the full amount of the state budget with a surrender ratio for banked allowances or in a lesser amount to address the potential effect of the allowance bank (as entertained in this alternative on which we are inviting comment). In other words, the effect of this alternative approach would be to reduce unit-level allowance allocations in those years in a proportional manner (e.g., all unit-level allowance allocations would decrease by the same percentage as

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the reduction in total allowances issued below that state's budget).

Additionally, the EPA is soliciting comment on less and more restrictive approaches to address use of the CSAPR EGU NO_X ozone allowance bank. Specifically, the EPA seeks comment on: (1) allowing banked 2015 and 2016 CSAPR NO_X ozone allowances to be used for compliance with the proposed budgets for the 2008 ozone NAAQS starting in 2017 at a 1-to-1 ratio, or (2) completely disallowing the use of banked 2015 and 2016 CSAPR NO_X ozone allowances for compliance with the proposed budgets for the 2008 ozone NAAQS starting in 2017. The EPA is also soliciting comment on whether and how the assurance provision penalty might be increased, in conjunction with any of the above approaches, to address the relationship of the allowance bank to emissions occurring under this revised program from 2017 onward.

B. Use of CSAPR NO_X Ozone-season Allowances from States Addressing the 1997 Ozone NAAQS for Compliance in States Addressing the 2008 Ozone NAAQS

Consistent with the original CSAPR, EGUs covered by the seasonal NO_X budget trading program that will be incorporated into these proposed FIPs are able to trade NO_X ozone-season emission allowances among units within the state and across

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state boundaries, with emissions and the use of allowances limited by the assurance provisions.

The EPA is considering how to transition allowance trading between the group of states that are in the CSAPR NO_X ozone-season program with respect to the 1997 ozone NAAQS but will not have updated emissions budgets proposed in this action (e.g., Georgia based on this proposal) and the group of states for which the EPA is proposing to establish new or lower budgets to address the 2008 ozone NAAQS in this action.

The EPA believes that, where appropriate and feasible, continuity of programs is important, particularly for market-based and other power sector regulations, as this sector makes long-term investment and operational decisions. However, CSAPR allowances issued under budgets established to address the 1997 ozone NAAQS using a $500 per ton cost threshold in one state may not be appropriately valued to reduce interstate ozone transport in another state for the 2008 NAAQS under this proposal where budgets are being established using a $1,300 per ton cost threshold. In the original CSAPR rulemaking, the EPA discussed the concern that allowing unrestricted trading between groups of states whose budgets were established using different cost thresholds would impact whether the necessary emission

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reductions would be achieved within each state.[106] The assurance provisions used in CSAPR provide some assurance that emission reductions will occur within each state, but in the CSAPR rulemaking the EPA acknowledged concerns that the assurance provisions alone may not be sufficient. Consistent with those previously acknowledged concerns, the EPA is proposing in this rule not to allow these two groups of states to trade without some additional assurances that the emission reductions will be appropriately achieved within each state.

However, because of the relatively small size of the group of states with budgets set using the $500 per ton cost threshold, the EPA is not proposing to prohibit altogether trading between the two groups in this instance. The EPA does not expect that a single state (i.e., Georgia) would drastically influence emission reductions in the other 23 states covered by this proposed rule. EPA is instead proposing to permit trading between the two groups of ozone states subject to certain restrictions on trading. In particular, the EPA is proposing to require that sources in states addressing the 2008 ozone NAAQS under this proposal may use allowances issued in states only addressing the 1997 ozone NAAQS via the CSAPR trading programs (e.g., Georgia) at a rate of 2.5 allowances for each ton of NO_X

[106] 76 FR at 48263-64.

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emitted. The EPA proposes a ratio of 2.5-to-1 in order to align with the ratio of the cost of ozone season EGU NO_X reduction promulgated in the original CSAPR (i.e., $500 per ton) to the cost proposed for this rule (i.e., $1,300 per ton). The EPA proposes this restriction as sufficient, in conjunction with the assurance provisions, to protect the needed reductions in the 23 states addressing interstate transport for the 2008 ozone NAAQS. The EPA requests comments on this approach. The EPA also seeks comment on using a different ratio than 2.5-to-1, and on using the same ratio as the ratio for the use of banked allowances, whether that ratio is 4-to-1 as proposed or a different ratio.

The EPA is also seeking comment on allowing trading without distinction between the particular NAAQS (1997 ozone NAAQS or 2008 ozone NAAQS) for which an upwind state has obligations to reduce transported pollution, and subject only to the constraints of the CSAPR assurance provisions with no additional restrictions. The EPA is soliciting comment on whether and how the assurance provision penalty might be increased in conjunction with this approach.

Alternatively, the EPA is seeking comment on separating compliance between groups of upwind states under each NAAQS, whereby the use of NO_X ozone-season emission allowances from one group (e.g., sources in states only covered for the 1997 ozone

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NAAQS) would be disallowed for compliance use by units in the other group (e.g., sources in states covered for the 2008 ozone NAAQS), similar to the existing separation between the CSAPR SO_2 Group 1 and CSAPR SO_2 Group 2 programs.

C. Use of CSAPR NO_X Ozone-season Allowances between States with Different Control Stringencies Addressing the 2008 Ozone NAAQS

As discussed in Section VI of this proposal, the EPA notes that the evaluation of EGU NO_X requirements for the final rule could show one or more states fully addressing their good neighbor obligation based on ozone season NO_X control requirements represented by one cost level while one or more other states have ozone season NO_X control requirements based on a more stringent cost level. In this situation, the EPA proposes that it would quantify requirements for these different groups of states based on different uniform control stringencies. However, CSAPR allowances issued under budgets established using a one cost threshold (e.g., $1,300 per ton) in one state may not be appropriately valued to reduce interstate ozone transport in another state where budgets might be established using different cost threshold (e.g., $3,400 per ton). Consistent with the previous discussion (regarding allowances issued in states continuing to address the 1997 ozone NAAQS under budgets

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established using $500 per ton threshold), the EPA is proposing to permit trading between these groups of states subject to certain restrictions on trading. In particular, the EPA is proposing to require that sources in states with emissions budgets established using the more stringent cost thresholds (e.g., $3,400 per ton) may use allowances issued in states with emissions budgets established using the less stringent cost thresholds (e.g., $1,300 per ton) at a rate of allowances for each ton of NO_X emitted based on the ratio of these cost thresholds. For example, states with emissions budgets established using $3,400 per ton could use allowances at a rate of approximately 2.5-to-1 in order to align with the ratio of the relevant cost thresholds. The EPA requests comments on allowing the states to trade with the proposed restrictions on the use of allowances by sources in states controlled using the more stringent cost threshold.

The EPA is also seeking comment on allowing trading without distinction between the particular cost thresholds for which an upwind state has obligations to reduce transported pollution, and subject only to the constraints of the CSAPR assurance provisions with no additional restrictions. The EPA is also soliciting comment on whether and how the assurance provision penalty might be increased in conjunction with this approach.

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Alternatively, the EPA is seeking comment on separating compliance between groups of upwind states under each cost threshold, whereby the use of NO_X ozone-season emission allowances from one group (e.g., sources in states with allowances issued using the more stringent cost threshold) would be disallowed for compliance use by units in the other group, similar to the existing separation between the CSAPR SO_2 Group 1 and CSAPR SO_2 Group 2 programs.

D. Summary of Proposed Allowance Surrender Ratios

As discussed in sections a. and b. above, the EPA proposes that in this updated rulemaking, EGUs would be able to trade NO_X ozone-season emission allowances among units within the state and across state boundaries, with emissions and use of allowances limited by the assurance provisions. However, the EPA is proposing to impose certain additional limits on the use of allowances starting in 2017 for EGUs in the 23 states with updated budgets in this proposal. Table VII-2 summarizes the limits on the proposed use for CSAPR NO_X ozone-season allowances.[107]

[107] In the regulatory text revisions for this proposal, the proposed limits discussed here are described in terms of the "tonnage equivalent" of an allowance. In the case of 2015 or 2016 vintage allowances used for compliance in a control period in 2017 or later, where 4 allowances would be needed for each ton of emissions, each such allowance would have a tonnage equivalent of 0.25 tons per allowance (1/4 = 0.25). In the case of 2017 or later allowances from a

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Table VII.B-2. Proposed Use of CSAPR NO_X Ozone-Season Allowances for 2015, 2016, 2017, and Later Allowance Vintages (Tons)

		Compliance Period and Unit Location of Allowance Use		
		Used for 2015 or 2016 Compliance – any state	Used for 2017 or later compliance - unit in states with updated budget for 2008 ozone NAAQS	Used for 2017 or later compliance – states with original CSAPR emissions budget
Vintage Year and State of Allowance Issuance	2015 or 2016 vintage – any state	1 for 1	4 for 1	1 for 1
	2017 or later vintage – states with updated budget for 2008 ozone NAAQS	Not Applicable	1 for 1	1 for 1
	2017 or later vintage – states with original CSAPR emissions budget	Not Applicable	2.5 for 1	1 for 1

6. Compliance Deadlines

As discussed above at sections II.A., III.B., and IV.A., the proposed rule would require NO_X reductions from sources starting May 1, 2017, to ensure that reductions are made as

state with an original CSAPR budget used for compliance by a unit in a state with an updated budget based on the 2008 ozone NAAQS, where 2.5 allowances would be needed for each ton of emissions, each such allowance would have a tonnage equivalent of 0.40 tons per allowance (1/2.5 = 0.40). In a case where one allowance is needed for each ton of emissions, such allowances would have a tonnage equivalent of one ton per allowance. See proposed 40 CFR 97.524(f) in the regulatory text for this proposal.

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expeditiously as practicable to assist downwind states' attainment and maintenance of the 2008 ozone NAAQS. The compliance deadline is coordinated with the attainment deadline for the relevant NAAQS and, as discussed above, the rule includes provisions to assure that all necessary reductions occur at sources within each individual state.

In section VI above, the EPA explains that this is an adequate and reasonable time for sources to plan for compliance and operate necessary controls.

For states for which EPA has already established a FIP requiring their units to participate in the CSAPR NO_X ozone-season trading program because of transport obligations under the 1997 ozone NAAQS, no CFR changes are necessary to accommodate this compliance deadline. The EPA proposes to amend the regulatory text in 40 CFR section 97.506(c)(3) to reflect the 2017 start of compliance obligations for units in states that were not previously subject to the CSAPR NO_X ozone-season trading program (e.g., Kansas). The EPA also proposes to amend various FIP provisions in 40 CFR Part 52 to indicate the start and end of compliance obligations under the FIPs for sources in states added to the trading program under this rule (e.g., Kansas) or removed from the trading program in response to the D.C. Circuit's remand of certain NO_X ozone-season emissions

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budgets (e.g., Florida and South Carolina). These revisions are shown in the proposed regulatory text at the end of this preamble.

7. Monitoring and Reporting and the Allowance Management System

Monitoring and reporting in accordance with the provisions of 40 CFR Part 75 are required for all units subject to the CSAPR NO_X ozone-season trading programs and would also be required for all units covered under the proposed transport rule for the 2008 ozone NAAQS requirements. The EPA proposes that the monitoring certification deadline by which monitors are installed and certified for compliance use generally would be May 1, 2017, the beginning of the first compliance period proposed in this rule, with potentially later deadlines for units that commence commercial operation after July 1, 2016. Similarly, the EPA proposes that the first calendar quarter in which quarterly emission reporting is required would generally be the quarter including May 1, 2017. These deadlines are analogous to the current deadlines under CSAPR but are delayed by two years to reflect the fact that this rule's initial implementation year would be two years later than the existing CSAPR programs' initial implementation year.

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Under Part 75, a unit has several options for monitoring and reporting, namely the use of a CEMS; an excepted monitoring methodology based in part on fuel flow metering for certain gas- or oil-fired peaking units; low-mass emissions monitoring for certain non-coal-fired, low emitting units; or an alternative monitoring system approved by the Administrator through a petition process. In addition, sources can submit petitions to the Administrator for alternatives to specific CSAPR and Part 75 monitoring, recordkeeping, and reporting requirements. Each CEMS must undergo rigorous initial certification testing and periodic quality assurance testing thereafter, including the use of relative accuracy test audits (RATAs) and 24-hour calibrations. In addition, when a monitoring system is not operating properly, standard substitute data procedures are applied and result in a conservative estimate of emissions for the period involved.

Further, Part 75 requires electronic submission of a quarterly emissions report to the Administrator, and in a format prescribed by the Administrator. The report would contain all of the data required concerning ozone season NO_X emissions.

Units currently subject to CSAPR NO_X ozone-season or CSAPR NO_X annual trading program requirements monitor and report NO_X emissions in accordance with Part 75, so most sources would not have to make any changes to monitoring and reporting practices.

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In fact, only units in Kansas currently subject to the CSAPR NO_X annual trading program but not the CSAPR NO_X ozone-season trading program would need to start newly reporting ozone season NO_X mass emissions. These emissions are already measured under the annual program, so the change would be a minor reporting modification. Units in the following states monitor and report NO_X emissions under the CSAPR NO_X ozone-season trading program and would continue to do so without change under the CSAPR ozone update for the 2008 NAAQS: Alabama, Arkansas, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.

8. Recordation of Allowances

The EPA proposes to update the deadlines by which EPA would record allowances for the CSAPR NO_X ozone-season trading program for the compliance periods in the years from 2017 through 2022. The proposed new dates would amend the recordation deadlines in 40 CFR 97.521 as shown in the proposed regulatory text amendments at the end of this proposal. The existing recordation provisions require EPA to record either FIP-based (i.e., governed by part 97) or SIP-based allocations for 2017 and 2018 by July 1, 2016. The EPA proposes to delay this deadline to

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December 1, 2016. The extension would allow EPA to finalize any changes to the state budgets for the 2017 compliance period before recording 2017 allowances. This would prevent the need to take back allowances that were recorded under existing budgets in cases where state budgets are reduced. The extended deadline would still allow allocations to be recorded five months prior to the start of the 2017 compliance period, giving affected units time to make compliance plans. Compliance true-up for the 2017 ozone season occurs after December 1, 2017, so affected sources would have more than a year from the extended recordation deadline to ensure they hold enough allowances for 2017 ozone season compliance. The EPA is taking comment on this new deadline for 2017 and 2018 allowance allocation recordation. The EPA is also taking comment on whether the provision to delay 2017 and 2018 allocation recordation should be finalized ahead of final action on this full proposal if this proposal is not finalized before July 1, 2016.

The EPA is also proposing to extend the existing deadlines for recording CSAPR NO_X ozone-season allowances for the 2019 and 2020 compliance periods and for the 2021 and 2022 compliance periods each by one year, to July 1, 2018, and July 1, 2019, respectively. The purpose of these proposed deadline extensions is to provide time for states to submit SIP revisions to modify

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or replace the FIPs proposed in this rule on schedules comparable to the schedules for the SIP revision options that the states have under the current CSAPR regulations. The EPA seeks comment on extending these recordation deadlines as discussed.

C. Submitting a SIP

As noted earlier in this section VIII, states may replace the FIP with a SIP at any time if approved by the EPA. "Abbreviated" and "full" SIP options continue to be available. An "abbreviated SIP" allows a state to submit a SIP that would modify allocation provisions in the NOx budget trading program that is incorporated into FIP to allow the state to substitute its own allocation provisions. A second approach, referred to as a full SIP, allows a state to adopt a trading program meeting certain requirements that would allow sources in the state to continue to use the EPA-administered trading program through an approved SIP, rather than a FIP. In addition, as under CSAPR, EPA proposes to provide states with an opportunity to adopt state-determined allowance allocations for existing units for the second compliance period under this rule – in this case, the 2018 compliance period – through streamlined SIP revisions. See

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76 FR 48326-48332 for additional discussion on full and abbreviated SIP options and 40 CFR 52.38(b).

1. 2018 SIP Option

As under CSAPR, the EPA proposes to allow a state to submit a SIP revision establishing allowance allocations for existing units for the second year of the new requirements, 2018, to replace the FIP-based allocations. The process would be the same as under the current rule with deadlines shifted roughly 2 years — i.e., a state would submit a letter to EPA by November 15, 2016 indicating its intent to submit a complete SIP revision by April 1, 2017. The SIP would provide in an EPA-prescribed format a list of existing units and their allocations for the 2018 control period. If a state does not submit a letter of intent to submit a SIP revision, FIP allocations would be recorded by December 1, 2016. If a state submits a timely letter of intent but fails to submit a SIP revision, FIP allocations would be recorded by April 1, 2017. If a state submits a timely letter of intent followed by a timely SIP revision that is approved, the approved SIP allocations would be recorded by October 1, 2017.

2. 2019 and Beyond SIP Option

For the 2019 control period and later, EPA proposes that the SIP submittal deadline be delayed one year, until December

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1, 2017, from the current deadline. The deadline to then submit state allocations for 2019 and 2020 would be June 1, 2018 and the deadline to record those allocations would be July 1, 2018. Under the proposed new deadlines, a state could submit a SIP revision for 2021 and beyond control periods by December 1, 2018, with state allocations due June 1, 2019, and allocation recordation by July 1, 2019. For 2019 control period and later, SIPs can be full or abbreviated SIPs. An allocation methodology approved in an abbreviated SIP submitted for 2017 under the existing CSAPR regulations could also apply under the proposed new rule in 2017 and 2018. See above and 76 FR 48326-48332 for additional discussion on full and abbreviated SIP options and 40 CFR 52.38(b).

3. SIP Revisions that Do Not Use the CSAPR Trading Program

For a transport SIP revision that does not use the CSAPR NO_X ozone-season trading program, EPA would evaluate the transport SIP based on the particular control strategies selected and whether the strategies as a whole provide adequate and enforceable provisions ensuring that the emission reductions will be achieved. The SIP revision at a minimum should include the following general elements: (1) a comprehensive baseline 2017 statewide NO_X emission inventory (which includes growth and existing control requirements), which should be consistent with

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the 2017 emission inventory the EPA would use when finalizing this rulemaking to calculate the required state budget; (2) a list and description of control measures to satisfy the state emission reduction obligation and a demonstration showing when each measure would be in place to meet the 2017 compliance date; (3) fully-adopted state rules providing for such NO_X controls during the ozone season; (4) for EGUs greater than 25 MWe and large boilers and combustion turbines with a rated heat input capacity of 250 mmBtu per hour or greater, Part 75 monitoring, and for other units, monitoring and reporting procedures sufficient to demonstrate that sources are complying with the SIP; and (5) a projected inventory demonstrating that state measures along with federal measures will achieve the necessary emission reductions in time to meet the 2017 compliance deadline.[108] The SIPs must meet the requirements for public hearing, be adopted by the appropriate board or authority, and establish by a practically enforceable regulation or permit a schedule and date for each affected source or source category to achieve compliance. Once the state has made a SIP submission, the EPA will evaluate the submission(s) for completeness. The EPA's criteria for determining completeness of a SIP submission are codified at 40 CFR part 51 appendix V.

[108] The EPA notes that the SIP is not required to include modeling.

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For further information on replacing a FIP with a SIP, see the discussion in the final CSAPR rulemaking (76 FR 48326, August 8, 2011). The EPA requests comment on what types of additional information and guidance would be helpful and stands ready to assist states in SIP development.

4. Submitting a SIP to Participate in CSAPR for States Not Included in this Proposal

The EPA believes that there could be circumstances where a state that is not obligated to reduce NO_X emissions in order to eliminate significant contribution to nonattainment or interference with maintenance of ozone standards in another state (such as Florida or South Carolina for purposes of this proposal) may wish to participate in the NO_X ozone-season trading program in order to serve a different regulatory purpose. For example, the state may have a pending request for redesignation of an area to attainment that relies on participation in the trading program as part of the state's demonstration that emissions will not exceed certain levels, or the state may wish to rely on participation in the trading program for purposes of a SIP revision to satisfy certain obligations under the Regional Haze Rule. The EPA seeks comment on whether the EPA should revise the CSAPR regulations to allow the EPA to approve a SIP revision in which a state seeks to participate in the NO_X ozone-

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season trading program for a purpose other than addressing ozone transport obligations.

Further, the EPA seeks comment on the conditions that should apply to any such approval in order to ensure that the state's participation is consistent with the trading program's ability to achieve the program's objectives with respect to interstate transport of ozone pollution. The EPA believes that the primary conditions for consideration in this circumstance would be the level of the state emissions budget and what, if any, limitations would be placed on the use of allowances issued to the sources in that state by sources in other states.

The EPA specifically seeks comment on whether a presumption of approvability of such a SIP revision should arise, without limitations on the use of corresponding allowances for compliance by sources within that state or in other states, if the state would adopt as part of the SIP revision a NO_X ozone-season emissions budget no higher than the emissions budgets that the EPA finalizes under this rule. For example, based on this proposal, an emissions budget that reflects EGU NO_X mitigation strategies represented by a uniform cost of $1,300 per ton. The EPA notes that such emissions budgets could be developed using the data and analysis used to establish the emissions budgets for this rule.

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EPA also specifically seeks comment on whether a presumption of approvability of such a SIP revision should arise, with limitations on the use of allowances issued to the state's sources analogous to the limitations proposed for allowances issued to Georgia's units in this rule, if the state would adopt as part of the SIP revision a NO_X ozone-season emissions budget no higher than the base case ozone season NO_X emissions that EPA projected for the state in the analysis used to establish the emissions budgets for this rule.

The EPA also specifically seeks comment on whether, in the case of a state previously subject to the CSAPR NO_X ozone-season trading program (e.g., Florida or South Carolina), a presumption of approvability of such a SIP revision should arise at an emissions level higher than the state's base case emissions in the analysis used to establish the emissions budgets for this rule – for example, an emissions level equal to the state's previously promulgated CSAPR budget – subject to the imposition of trading limitations on allowances issued to the state's units analogous to the limitations proposed for allowances issued to Georgia's units in this proposal.

Finally, the EPA also seeks comment on whether a state whose allowances would otherwise be subject to limitations on use analogous to the limitations proposed for allowances issued

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to Georgia's units in this rule could avoid those limitations by adopting in a SIP revision a more stringent budget reflecting emission levels at higher dollar per ton emission reduction costs comparable to the dollar per ton emission reduction costs used to establish the budgets for other states in this rule.

D. Title V Permitting

The proposed rule, like CSAPR, does not establish any permitting requirements independent of those under title V of the CAA and the regulations implementing title V, 40 CFR Parts 70 and 71.[109] All major stationary sources of air pollution and certain other sources are required to apply for title V operating permits that include emission limitations and other conditions as necessary to assure compliance with the applicable requirements of the CAA, including the requirements of the applicable State Implementation Plan. CAA sections 502(a) and 504(a), 42 U.S.C. 7661a(a) and 7661c(a). The ''applicable requirements'' that must be addressed in title V permits are defined in the title V regulations (40 CFR 70.2 and 71.2 (definition of ''applicable requirement'')).

The EPA anticipates that, given the nature of the units subject to this transport rule and given that many of the units

[109] Part 70 addresses requirements for state title V programs, and Part 71 governs the federal title V program.

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covered here are already subject to CSAPR, most of the sources at which the units are located are already subject to title V permitting requirements. For sources subject to title V, the interstate transport requirements for the 2008 ozone NAAQS that would be applicable to them under the final FIPs will be ''applicable requirements'' under title V and therefore will need to be addressed in the title V permits. For example, requirements concerning designated representatives, monitoring, reporting, and recordkeeping, the requirement to hold allowances covering emissions, the assurance provisions, and liability will be ''applicable requirements'' to be addressed in the permits.

Title V of the CAA establishes the basic requirements for state title V permitting programs, including, among other things, provisions governing permit applications, permit content, and permit revisions that address applicable requirements under final FIPs in a manner that provides the flexibility necessary to implement market-based programs such as the trading programs established by CSAPR and updated by this proposed ozone interstate transport rule. 42 U.S.C. 7661a(b).

In CSAPR, EPA established standard requirements governing how sources covered by the rule would comply with title V and

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its regulations.[110] 40 CFR 97.506(d). Under this proposed rule, EPA proposes that those same requirements would continue to apply to sources already in the CSAPR NO_X Ozone-season Trading Program and to any newly covered sources that have been added to address interstate transport of the 2008 ozone NAAQS. For example, the title V regulations provide that a permit issued under title V must include "[a] provision stating that no permit revision shall be required under any approved . . . emissions trading and other similar programs or processes for changes that are provided for in the permit." 40 CFR 70.6(a)(8) and 71.6(a)(8). Consistent with these provisions in the title V regulations, in CSAPR, EPA included a provision stating that no permit revision is necessary for the allocation, holding, deduction, or transfer of allowances. 40 CFR 97.506(d)(1). This provision is also included in each title V permit for a covered source. The EPA proposes to maintain its approach under CSAPR that allowances can be traded (or allocated, held, or deducted) without a revision to the title V permit of any of the sources involved.

[110] EPA also issued a guidance document and template that includes instructions describing how to incorporate the CSAPR applicable requirements into a source's title V permit. http://www.epa.gov/airtransport/CSAPR/pdfs/CSAPR_Title_V_Permit_Guidance.pdf

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Similarly, the EPA is also proposing to maintain that sources in the CSAPR NOx Ozone-season Trading Program can continue to use the title V minor modification procedure to change their approach for monitoring and reporting emissions, in certain circumstances. Specifically, sources may use the minor modification procedure so long as the new monitoring and reporting approach is one of the prior-approved approaches under CSAPR (i.e., approaches using a continuous emission monitoring system, an excepted monitoring system under appendices D and E to Part 75, a low mass emissions excepted monitoring methodology under 40 CFR 75.19, or an alternative monitoring system under subpart E of Part 75), and the permit already includes a description of the new monitoring and reporting approach to be used. *See* 40 CFR 97.506(d)(2); 40 CFR 70.7(e)(2)(i)(B) and 40 CFR 71.7(e)(1)(i)(B). As described in our 2015 guidance, we suggest in our template that sources may comply with this requirement by including a table of all of the approved monitoring and reporting approaches under the rule, and the applicable requirements governing each of those approaches. Inclusion of the table in a source's title V permit therefore allows a covered unit that seeks to change or add to their chosen monitoring and recordkeeping approach to easily comply

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with the regulations governing the use of the title V minor modification procedure.

Parts XXX and XXX [CITE GUIDANCE DOCUMENT] set forth in detail the approaches previously discussed that are available for covered units to use for monitoring and reporting emissions, and provide reference to the relevant provisions in Part 75. Under CSAPR, in order to change a monitoring or reporting approach, unit owners and operators must submit monitoring system certification applications to the EPA establishing the monitoring and reporting approach actually to be used by the unit, or, if the owners and operators choose to employ an alternative monitoring system, to submit petitions for that alternative to the EPA. These applications and petitions are subject to EPA review and approval to ensure consistency in monitoring and reporting among all trading program participants. The EPA's responses to any petitions for alternative monitoring systems or for alternatives to specific monitoring or reporting requirements are to be posted on the EPA's website[111]. EPA proposes to maintain the same approach in this proposed rule.

Consistent with the EPA's approach under CSAPR, the applicable requirements resulting from this proposed FIP would

[111] http://www.epa.gov/airmarkets/participants/monitoring/petitions.html

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be incorporated into covered sources' existing title V permits either pursuant to the provisions for reopening for cause (40 CFR 70.7(f) and 40 CFR 71.7(f)) or the standard permit renewal provisions (40 CFR 70.7(c) and 71.7(c)).[112] For sources newly subject to title V that will also be covered sources under the final FIPs, the initial title V permit issued pursuant to 40 CFR 70.7(a) should address the final FIP requirements.

As in CSAPR, the approach to title V permitting under the proposed FIPs imposes no independent permitting requirements and should reduce the burden on sources already required to be permitted under title V and on permitting authorities.

E. *Relationship to Other Emission Trading and Ozone Transport Programs*

1. Interactions with Existing CSAPR[113] Annual Programs, Title IV Acid Rain Program, NO_X SIP Call, Section 176A Petition, and Other State Implementation Plans

a. *CSAPR Annual Programs*

[112] A permit is reopened for cause if any new applicable requirements (such as those under a FIP) become applicable to a covered source with a remaining permit term of 3 or more years. If the remaining permit term is less than 3 years, such new applicable requirements will be added to the permit during permit renewal. See 40 CFR 70.7(f)(1)(I) and 71.7(f)(1)(I).

[113] The CSAPR Annual Programs are referred to in regulations as the Transport Rule NO_X Annual Trading Program (40 CFR 97.401-97.435), the Transport Rule SO_2 Group 1 Trading Program (40 CFR 97.601-97.635) and the Transport Rule SO_2 Group 2 Trading Program (40 CFR 97.701-97.735).

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Nothing in this proposal affects any CSAPR NO_X annual or CSAPR SO_2 Group 1 or CSAPR SO_2 Group 2 requirements. The CSAPR annual requirements were premised on the 1997 and 2006 $PM_{2.5}$ NAAQS that are not being addressed in this rulemaking. The CSAPR NO_X annual trading program and the CSAPR SO_2 Group 1 and Group 2 trading programs remain in place and will continue to be administered by the EPA.

The EPA acknowledges that, in addition to the ozone budgets discussed above, the D.C. Circuit has remanded for reconsideration the CSAPR SO_2 budgets for Alabama, Georgia, South Carolina, and Texas. *EME Homer City II*, 795 F.3d at 138. This proposal does not address the remand of these CSAPR phase 2 SO_2 emissions budgets. The EPA intends to address the remand of the phase 2 SO_2 annual emissions budgets separately.

b. *Title IV Interactions*

This proposed rule if adopted would not affect any Acid Rain Program requirements. Any Title IV sources that are subject to provisions of this proposed rule would still need to continue to comply with all Acid Rain provisions. Acid Rain Program SO_2 and NO_X requirements are established independently in Title IV of the Clean Air Act, and will continue to apply independently of this proposed rule's provisions. Acid Rain sources will still be required to comply with Title IV requirements, including the

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requirement to hold Title IV allowances to cover SO_2 emissions at the end of a compliance year.

c. *NO_X SIP Call Interactions*

States affected by both the NO_X SIP Call and any final CSAPR ozone update for the 2008 NAAQS will be required to comply with the requirements of both rules. This proposed rule requires NO_X ozone season emission reductions from EGUs greater than 25 MW in nearly all NO_X SIP Call states and at levels greater than required by the NO_X SIP Call. Therefore, this proposed rule would satisfy the requirements of the NO_X SIP Call for these large EGU units.

The NO_X SIP Call states used the NO_X Budget Trading Program to comply with the NO_X SIP Call requirements for EGUs serving a generator with a nameplate capacity greater than 25 MW and large non-EGUs with a maximum rated heat input capacity greater than 250 MMBTU/hr. (In some states, EGUs smaller than 25 MW were also part of the NBP as a carryover from the Ozone Transport Commission NO_X Budget Trading Program.) When the EPA promulgated CAIR, it allowed states to modify that program and include all NO_X Budget Trading Program units in the CAIR NO_X Ozone-season Trading Program as a way to continue to meet the requirements of the NO_X SIP Call for these sources.

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In CSAPR, however, the EPA allowed states to expand applicability of the trading program to EGUs smaller than 25 MW but did not allow the expansion of applicability to include large non-EGU sources. The reason for excluding large non-EGU sources was largely that emissions from these sources were generally much lower than the budget amount and there was concern that surplus allowances created as a result of an overestimation of baseline emissions and subsequent shutdowns (since 1999 when the NO_X SIP Call was promulgated) would prevent needed reductions by the EGUs to address significant contribution to downwind air quality impacts.

Since then, states have had to find appropriate ways to continue to show compliance with the NO_X SIP Call, particularly for large non-EGUs.[114] Most states that included such sources in CAIR are still working to find suitable solutions.[115]

Therefore, the EPA is taking comment on whether to allow any NO_X SIP Call state affected by this proposed rule to voluntarily submit a SIP revision at a budget level that is environmentally neutral to address the state's NO_X SIP Call

[114] CSAPR generally satisfies NO_X SIP Call requirements for EGUs in most affected states because the CSAPR cap is lower than the EGU portion of the NO_X SIP Call emission levels.

[115] Affected sources continue to report ozone season emissions using part 75 as required by the NO_X SIP Call and emissions in most states cannot (or are not likely to) exceed NO_X SIP Call non-EGU budget levels.

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requirement for ozone season NO_X reductions. The SIP revision could include a rule to expand the applicability of the CSAPR NO_X ozone-season trading program to include all NO_X Budget Trading Program units. Analysis shows that these units (mainly large non-EGU boilers, combustion turbines, and combined cycle units with a maximum rated heat input capacity greater than 250 mmBtu/hr) continue to emit well below their portion of the NO_X SIP Call budget. In order to ensure that the necessary amount of EGU emission reductions occur for this proposed rule, the corresponding state ozone-season emissions budget amount could be increased by the lesser of the highest ozone season NO_X emissions (in the last 3 - 5 years)[116] from those units or the relevant non-EGU budget under the NO_X SIP Call, and this small group of non-EGUs could participate in the CSAPR ozone-season trading program. The environmental impact would be neutral using this approach, and hourly reporting of emissions under part 75 would continue. This approach would address requests by states for help in determining an appropriate way to address the continuing NO_X SIP Call requirement as to non-EGU sources. EPA proposes that if this option is finalized that the variability limits established for EGUs be unchanged as a result of

[116] EPA requests comment on the appropriate time period for this determination.

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including these non-EGUs. The assurance provisions would apply to EGUs, and emissions from non-EGUs would not affect the assurance levels.

The NO_X SIP Call generally requires that states choosing to rely on large EGUs and large non-EGUs for meeting NO_X SIP Call emission reduction requirements must establish a NO_X mass emissions cap on each source and require Part 75, subpart H monitoring. As an alternative to source-by-source NO_X mass emission caps, a state may impose NO_X emission rate limits on each source and use maximum operating capacity for estimating NO_X mass emissions or may rely on other requirements that the state demonstrates to be equivalent to either the NO_X mass emission caps or the NO_X emission rate limits that assume maximum operating capacity. Collectively, the caps or their alternatives cannot exceed the portion of the state budget for those sources. *See* 40 CFR 51.121(f)(2) and (i)(4). If the EPA were to allow a state to expand the applicability of this proposed rule to include all the NO_X Budget Trading Program units in the CSAPR NO_X ozone-season trading program, the cap requirement would be met through the new budget and the monitoring requirement would be met through the trading program provisions, which require part 75 monitoring. Whether this option is finalized or not, the EPA will work with states to ensure that NO_X SIP Call obligations

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continue to be met. The EPA requests comment on the voluntary inclusion of NO_X SIP Call non-EGUs in this 2008 ozone-season proposed rule.

d. *CAA Section 176A Petition to Expand the OTR*

On December 9, 2013, the EPA received a CAA section 176A petition from the states of Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. The petition was amended on December 12, 2013 to add the state of Pennsylvania as a petitioning state. The petition requests that the EPA add 8 states and the remainder of the Commonwealth of Virginia to the current Ozone Transport Region that was established under CAA section 184.[117] The EPA will address this petition at a future date.

e. *Other State Implementation Plans*

In this proposal, the EPA has not conducted any technical analysis to determine whether compliance with the proposed rule would satisfy other requirements for EGUs in any attainment or nonattainment areas (e.g., RACT or BART). For that reason, the EPA is not now making determinations nor establishing any

[117] The named 8 states are: Illinois, Indiana, Kentucky, Michigan, North Carolina, Ohio, Tennessee, and West Virginia. Currently, the portion of the Commonwealth of Virginia in the OTR is in the consolidated metropolitan statistical area that includes the District of Columbia and northern Virginia.

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presumptions that compliance with the proposed rule satisfies any other requirements for EGUs. Based on analyses that states conduct on a case-by-case basis, states may be able to conclude that compliance with the proposed rule for certain EGUs fulfills other SIP requirements.

2. *Other Federal Rulemakings*

a. Clean Power Plan

On August 3, 2015, President Obama and EPA announced the Clean Power Plan – a historic and important action on emissions that contribute to climate change. The CPP reduces carbon pollution from the power sector. With strong but achievable standards for power plants, and customized goals for states to cut the carbon pollution (CO_2) that is driving climate change, the Clean Power Plan (CPP) provides national consistency, accountability and a level playing field while reflecting each state's energy mix.

The Clean Air Act – under section 111(d) – creates a partnership between EPA, states, tribes and U.S. territories – with EPA setting a goal and states and tribes choosing how they will meet it. The CPP follows that approach. The CPP establishes interim and final CO_2 emission performance rates and statewide goals. States then develop and implement plans that ensure that the power plants in their state – either individually, together

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or in combination with other measures – achieve these rates or goals. States will be required to submit a state plan, or an initial submittal with an extension request, by September 6, 2016. Complete state plans must be submitted no later than September 6, 2018. The interim rates and goals are assessed over the years 2022 to 2029 and the final CO_2 emission performance rates, rate-based goals, or mass-based goals are assessed for 2030 and after.

Because the final deadline for states to submit complete plans under the CPP is September 2018 and because mandatory CPP reductions do not begin until the interim period (i.e., starting in 2022), the EPA does not anticipate significant interactions with the CPP and the near-term (i.e., starting in 2017) ozone season EGU NO_X emission reduction requirements under this proposal.

However the EPA notes that actions taken to reduce CO_2 emissions (e.g., deployment of zero-emitting generation) may also reduce ozone season NO_X emissions. To the extent that states or electric utilities consider emission reduction strategies to meet these two separate requirements – CPP and interstate ozone transport – in a coordinated manner, they may find efficiency gains in that actions to meet the CPP goals may also help meet interstate ozone transport requirements.

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The EPA believes that timing flexibility provided in the CPP offers significant benefits that allow states to develop plans that will help achieve a number of goals, including, but not limited to: reducing cost, addressing reliability concerns, addressing concerns about stranded assets, and facilitating the integration of meeting the emission guidelines and compliance by affected EGUs with other air quality and pollution control obligations on the part of both states and affected EGUs.

The EPA is also cognizant of the potential influence of addressing interstate ozone transport on the CPP. As states and utilities undertake the near- and longer-term planning that will be needed for the CPP, they will have the opportunity to consider how compliance with this rule can anticipate, or be consistent with, expected compliance strategies for the CPP. While some EGU NO_X mitigation strategies, most notably shifting generation from higher-NO_X emitting coal-fired units to lower NO_X emitting NGCC units, can potentially also reduce CO_2 emissions, the EGU emissions analysis performed for this interstate transport action does not results in a notable difference in CO_2 emissions. However, EPA's results do not preclude states and utilities from considering these programs together. And, as the EPA has structured the interstate transport obligations that would be established by this proposal as requirements to limit

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aggregate affected EGU emissions and the EPA is not proposing to enforce source-specific emission reduction requirements, EGU owners have the flexibility to plan for compliance with the interstate ozone transport requirements in ways that are consistent with state and EGU strategies to reduce CO_2 emissions for the Clean Power Plan.

With respect to concerns about potentially stranded investments[118] in NO_X control equipment, the EPA's budget-setting approach quantifies NO_X reductions from upgrading combustion controls at coal-fired units. However, CSAPR's flexible compliance does not require that specific NO_X controls be installed at any specific facilities, and we would not expect such controls to be installed on units that may not be economic to operate in the future.

b. *2015 Ozone Standard*

On October 1, 2015, the EPA strengthened the ground-level ozone NAAQS to 70 ppb, based on extensive scientific evidence about ozone's effects on public health and welfare. This proposed rule to update CSAPR to address interstate emissions transport with respect to the 2008 ozone NAAQS is a separate and distinct regulatory action and is not meant to address the CAA's

[118] A potential stranded investment is an investment in an EGU NOX reduction strategy (e.g., combustion controls) for which the affected EGU retires before the investment is fully depreciated.

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good neighbor provision with respect to the strengthened 2015 ozone NAAQS.

The EPA is mindful of the need to address ozone transport for the 2015 ozone NAAQS. The statutory deadline for the EPA to finalize area designations is October 1, 2017. Further, good neighbor SIPs from states are due on October 1, 2018. The steps taken under this proposal to reduce interstate ozone transport, when finalized, will help states attain and maintain the 2015 ozone NAAQS. Moreover, to facilitate the implementation of the CAA good neighbor provision the EPA intends to provide information regarding steps 1 and 2 of the CSAPR framework in the fall of 2016. In particular, the EPA expects to conduct modeling necessary to identify projected nonattainment and maintenance receptors and identify the upwind states that contribute significantly to these receptors.

VIII. Costs, Benefits, and Other Impacts of the Proposed Rule

The EPA evaluated the costs, benefits, and impacts of compliance with the proposed EGU NO_X ozone-season emissions budgets that reflect uniform NO_X costs of $1,300 per ton (see proposed emissions budgets in table VI.1). In addition, the EPA also assessed compliance with other more and less stringent alternative EGU NO_X ozone-season emissions budgets, reflecting

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uniform NO_X costs of $3,400 per ton and $500 per ton, respectively (see alternative emissions budgets in tables VI.2 and VI.3). The EPA evaluated the impact of implementing these emissions budgets to reduce interstate transport for the 2008 ozone NAAQS in 2017. More details for this assessment can be found in the Regulatory Impact Analysis in the docket for this proposed rule.

The EPA notes that its analysis of the regulatory control scenarios (i.e., the proposal and more and less stringent alternatives) is illustrative in nature, in part because the EPA proposes to implement the proposed EGU NO_X emissions budgets via a regional NO_X ozone-season allowance trading program. This implementation approach provides utilities with the flexibility to determine their own compliance path. The EPA's assessment develops and analyzes one possible scenario for implementing the NO_X budgets proposed by this action and one possible scenario for implementing the more and less stringent alternatives.

Table VIII.1 provides the projected 2017 EGU emissions reductions for the evaluated regulatory control scenarios.

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Table VIII.1 - Projected 2017 Emissions Reductions of NOx, SO_2, and CO_2 with the Proposed NOx Emissions Budgets and More or Less Stringent Alternatives (Tons)[1]

	Proposal	More Stringent Alternative	Less Stringent Alternative
NO_X (annual)	89,969	92,582	23,686
NO_X (ozone season)	84,856	83,680	25,051
SO_2 (annual)	383	425	301
CO_2 (annual)	610,092	614,385	719,760

[1] NOx and SO_2 emissions are reported in English (short) tons; CO_2 is reported in metric tons.

The EPA estimates the costs associated with compliance with the illustrative proposed regulatory control alternative to be approximately $93 million annually. These costs represent the private compliance cost of reducing NO_X emissions to comply with the proposal and include monitoring, recordkeeping, and reporting costs. Table VIII.2 provides the estimated costs for the evaluated regulatory control scenarios, including the proposal and more and less stringent alternatives. Estimates are in 2011 dollars.

Table VIII.2 – Cost Estimates for Compliance with the Proposed NO_X Emissions Budgets and More and Less Stringent Alternatives (2011$)[1]

	Proposal	More Stringent Alternative	Less Stringent Alternative
Costs	$93	$96	$4.7

[1] Levelized annualized costs over the period 2016 through 2040, discounted using the 4.77 discount rate used in IPM's objective function of minimizing the net present value of the stream of total costs of electricity generation.

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In this analysis, the EPA monetized the estimated benefits associated with reducing population exposure to ozone and $PM_{2.5}$ and co-benefits of decreased emissions of CO_2, but was unable to monetize the co-benefits associated with reducing exposure to mercury, carbon monoxide, and NO_2, as well as ecosystem effects and visibility impairment. In addition, the EPA expects positive health and welfare impacts associated with reduced levels of hydrogen chloride, but could not quantify these impacts. Among the benefits it could quantify, the EPA estimated combinations of health benefits at discount rates of 3 percent and 7 percent (as recommended by the EPA's *Guidelines for Preparing Economic Analyses* [U.S. EPA, 2014] and OMB's *Circular A-4* [OMB, 2003]) and climate co-benefits at discount rates of 5 percent, 3 percent, 2.5 percent, and 3 percent (95th percentile) (as recommended by the interagency working group). The EPA estimates the monetized ozone-related benefits[119] of the proposal to be $490 million to $790 million (2011$) in 2017 and the PM2.5-related co-benefits[120] of the proposal to be $190 million to $430 million (2011$) using a 3% discount rate and $170 million to $380 million (2011$) using a 7% discount rate. Further, the EPA

[119] The ozone-related health benefits range is based on applying different adult mortality functions (i.e., Smith et al. (2009) and Zanobetti and Schwartz (2008)).
[120] The PM2.5-related health co-benefits range is based on applying different adult mortality functions (i.e., Krewski et al. (2009) and Lepeule et al. (2012)).

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estimates CO_2-related co-benefits of $6.5 to $66 million (2011$). Additional details on this analysis are provided in the RIA for this proposal. Tables VIII.3 and VIII.5 summarize the quantified monetized human health and climate benefits of the proposal and the more and less stringent control alternatives. Table VIII.4 summarizes the estimated avoided ozone- and PM2.5-related health incidences for the proposal and the more and less stringent control alternatives.

Table VIII.3 Estimated Health Benefits of Projected 2017 Emissions Reductions for the Proposal and More or Less Stringent Alternatives (millions of 2011$)[1]

	Proposal	More Stringent Alternative	Less Stringent Alternative
NO_X (as ozone)	$490 to $790	$500 to $820	$140 to $220
NO_X (as PM2.5)			
3% Discount Rate	$190 to $430	$190 to $440	$49 to $110
7% Discount Rate	$170 to $380	$170 to $390	$45 to $100
Total			
3% Discount Rate	$670 to $1,200	$690 to $1,300	$190 to $340
7% Discount Rate	$650 to $1,200	$670 to $1,200	$180 to $330

[1] The health benefits range is based on adult mortality functions (e.g., from Krewski et al. (2009) with Smith et al. (2009) to Lepeule et al. (2012) with Zanobetti and Schwartz (2008)).

Table VIII.4 Summary of Estimated Avoided Ozone-Related and $PM_{2.5}$-Related Health Incidences from Projected 2017 Emissions Reductions for the Proposal and More or Less Stringent Alternatives[1]

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Ozone-related Health Effects	Proposal	More Stringent Alternative	Less Stringent Alternative
Avoided Premature Mortality			
Smith *et al.* (2009) (all ages)	48	50	14
Zanobetti and Schwartz (2008) (all ages)	81	83	23
Avoided Morbidity			
Hospital admissions—respiratory causes (ages > 65)	79	81	22
Emergency room visits for asthma (all ages)	320	330	90
Asthma exacerbation (ages 6-18)	93,000	95,000	26,000
Minor restricted-activity days (ages 18-65)	240,000	240,000	67,000
School loss days (ages 5-17)	77,000	79,000	22,000
$PM_{2.5}$-related Health Effects			
Avoided Premature Mortality			
Krewski *et al.* (2009) (adult)	21	22	5.6
Lepeule *et al.* (2012) (adult)	48	50	13
Woodruff *et al.* (1997) (infant)	<1	<1	<1
Avoided Morbidity			
Emergency department visits for asthma (all ages)	12	12	3.1
Acute bronchitis (age 8–12)	31	32	8.1
Lower respiratory symptoms (age 7–14)	390	400	100
Upper respiratory symptoms (asthmatics age 9–11)	560	570	150
Minor restricted-activity days (age 18–65)	16,000	16,000	4,200
Lost work days (age 18–65)	2,700	2,700	700
Asthma exacerbation (age 6–18)	580	600	150
Hospital admissions—respiratory (all ages)	6.4	6.5	1.7
Hospital admissions—cardiovascular (age > 18)	7.8	8.0	2.1
Non-Fatal Heart Attacks (age >18)			
Peters *et al.* (2001)	25	26	6.6
Pooled estimate of 4 studies	2.7	2.8	0.7

[1] All estimates are rounded to whole numbers with two significant figures.

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Table VIII.5 Estimated Global Climate Co-benefits of CO_2 Reductions for the Proposal and More or Less Stringent Alternatives (millions of 2011$)[1]

Discount rate and statistic	Proposal	More Stringent Alternative	Less Stringent Alternative
5% (average)	$6.5	$6.5	$7.6
3% (average)	$23	$23	$27
2.5% (average)	$35	$35	$41
3% (95th percentile)	$66	$66	$78

[1] The social cost of carbon (SC-CO_2) values are dollar-year and emissions-year specific. SC-CO_2 values represent only a partial accounting of climate impacts.

The EPA combined this information to perform a benefit-cost analysis for this proposal (shown in table VIII.6 and for the more and less stringent alternatives—shown in the RIA in the docket for this proposed rule).

Table VIII.6 Total Costs, Total Monetized Benefits, and Net Benefits of the Proposal in 2017 for U.S. (millions of 2011$)

Climate Co-Benefits	$23
Air Quality Health	$670 to $1200
Total Benefits	$700 to $1200
Annualized	$93
Net Benefits	$600 to $1100
Non-Monetized	Non-monetized climate benefits Reductions in exposure to ambient NO_2 and Reductions in mercury deposition Ecosystem benefits assoc. with reductions Visibility impairment

There are additional important benefits that the EPA could not monetize. Due to current data and modeling limitations, our estimates of the co-benefits from reducing CO_2 emissions do not include important impacts like ocean acidification or potential tipping points in natural or managed ecosystems. Unquantified

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benefits also include climate co-benefits from reducing emissions of non-CO_2 GHGs (e.g., nitrous oxide and methane) and co-benefits from reducing direct exposure to SO_2, NO_X, and hazardous air pollution (e.g., mercury), as well as from reducing ecosystem effects and visibility impairment. Based upon the foregoing discussion, it remains clear that the benefits of this proposed action are substantial, and far exceed the costs. Additional details on benefits, costs, and net benefits estimates are provided in the RIA for this proposal.

For this proposed rule, the EPA analyzed the costs to the electric power sector using IPM. The IPM is a dynamic linear programming model that can be used to examine the economic impacts of air pollution control policies for SO_2 and NO_X throughout the contiguous United States for the entire power system. Documentation for IPM can be found in the docket for this rulemaking or at www.epa.gov/powersectormodeling.

The EPA provides a qualitative assessment of economic impacts associated with electricity price changes to consumers that may result from this proposed rule. This assessment can be found in the RIA for this proposed rule.

Executive Order 13563 directs federal agencies to consider the effect of regulations on job creation and employment. According to the Executive Order, "our regulatory system must

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protect public health, welfare, safety, and our environment while promoting economic growth, innovation, competitiveness, and job creation. It must be based on the best available science" (Executive Order 13563, 2011). Although standard benefit-cost analyses have not typically included a separate analysis of regulation-induced employment impacts, employment impacts are of particular concern and questions may arise about their existence and magnitude.

States have the responsibility and flexibility to implement policies and practices as part of developing SIPs for compliance with the emissions budgets found in this proposed rule. Given the wide range of approaches that may be used and industries that could be affected, quantifying the associated employment impacts is difficult.

IX. Summary of Proposed Changes to the Regulatory Text for the CSAPR FIPs and CSAPR Trading Programs

This section describes proposed amendments to the regulatory text in the Code of Federal Regulations (CFR) for the CSAPR FIPs and the CSAPR NO_X Ozone-Season Trading Program related to the findings and remedy discussed throughout this preamble. This section also describes other minor proposed corrections to

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the existing CFR text for the CSAPR FIPs and the CSAPR trading programs more generally.

The proposed regulatory text amendments related to the CSAPR FIPs and the CSAPR NO_X Ozone-Season Trading Program would be made in parts 52, 78, and 97 of title 40 of the CFR. Proposed changes to update the list of states that would be subject to FIPs to address obligations related to transported ozone pollution are in section 52.38(b)(2) (summarizing all states subject to FIPs), 52.540 (ending FIP for Florida), 52.882 (establishing FIP for Kansas), and 52.2140 (ending FIP for South Carolina). Section 97.510 contains the proposed changes establishing or revising the amounts of NO_X Ozone-Season trading budgets, new unit set-asides (NUSAs), Indian country NUSAs, and variability limits for states whose sources participate in the CSAPR NO_X Ozone-Season Trading Program. Additional proposed changes to accommodate trading program participation by sources whose coverage starts in different years are in sections 97.506(c)(3) (compliance deadlines), 97.512 (NUSA allowance allocation procedures), 97.530(b) (monitor certification deadlines), and 97.534(d) (reporting deadlines).

Proposed changes to section 52.38(b)(3) through (5) would update states' options to submit SIP revisions which, upon approval by the EPA, would modify certain CSAPR trading program

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provisions as applied to those states or replace the states' FIPs with SIPs – options that correspond closely to states' SIP revision options under CSAPR as initially promulgated. Proposed changes in section 97.521 (allowance recordation) delay the deadlines for recording CSAPR NO_X Ozone-Season allowances for the control periods in 2018 through 2022 in order to coordinate with the proposed updated submission deadlines for the optional SIP revisions. A similar proposed delay in the deadline for recording allowances for the control period in 2017 would provide time to finalize this rule and would thereby allow the EPA to record allocations of 2017 allowances based on the final revised budgets instead of recording allocations based on existing budgets that are proposed to be superseded.

The proposed limitations on the use of emission allowances issued for a compliance period before 2017 or from the state NO_X Ozone-Season trading budget for Georgia are implemented by redefining sources' obligations under the trading program in terms of "tonnage equivalents" of allowances rather than in terms of nominal quantities of allowances. Section 97.502 contains a proposed new definition of "tonnage equivalent" and related proposed modifications to the definitions of "CSAPR NO_X Ozone-Season allowance" and "CSAPR NO_X Ozone-Season emissions limitation." A new section 97.524(f) sets out the proposed

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procedures for determining the tonnage equivalent of an allowance. Additional proposed changes to reflect the use of allowances based on their tonnage equivalents (rather than their nominal numbers) to meet various obligations are contained in sections 97.506(c) (standard requirements relating to NO_X emissions), 97.511(c) (corrections of incorrect allowance allocations), 97.524 (compliance with emissions limitations and excess emissions provisions), and 97.525 (compliance with assurance provisions). A proposed change to section 78.1 would make EPA's determinations of the tonnage equivalents of particular allowance holdings subject to the administrative appeal procedures set forth in part 78.

In addition to the proposed CFR changes described above, this proposal also includes other minor amendments throughout the sections of parts 52, 78, and 97 implementing CSAPR, including sections implementing CSAPR's other three emissions trading programs. The most common category of these minor changes consists of proposed corrections to cross-references. Some cross-references would change as a result of this proposal and corrections of those cross-references are therefore related to the changes described above, while other cross-references as originally published indicated incorrect locations because of typographical errors or indicated correct locations but did not

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use the correct CFR format. In virtually all cases, the intended correct cross-reference can be determined from context, but the corrections clarify the regulations.

Besides the proposed corrections to cross-references, most of the remaining proposed corrections address other typographical errors. However, a small number of the proposed CFR changes correct errors that are not cross-references or obviously typographical errors. While the EPA views all of these proposed corrections as noncontroversial, a few merit a short explanation.

First, the phrase "with regard to the State" or "the State and" would be added in a number of locations in sections 52.38 and 52.39 where it was inadvertently omitted. The added phrase clarifies that when the EPA approves a state's SIP revision as modifying or replacing provisions in a CSAPR trading program, the modification or replacement is effective only with regard to that particular state. Correcting the omissions of these phrases would make the language concerning SIP revisions consistent for all the types of SIP revisions under all the CSAPR trading programs.

Second, the phrase "in part" would be removed from the existing FIP language in various sections of part 52 for certain states with Indian country to clarify that in order to replace a

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CSAPR FIP affecting the sources in these states, a SIP revision must fully, not "in part," correct the SIP deficiency identified by the EPA as the basis for the FIP. The intended purpose of the words "in part" – specifically, to indicate that approval of a state's SIP revision would not relieve any sources in Indian country within the borders of the state from obligations under the FIP – is already served by other language in those FIPs. The proposed corrections would make the language in these CSAPR FIPs consistent with the FIP language for the remaining CSAPR FIPs that address states with Indian country. Analogous proposed changes to the general CSAPR FIP language in sections 52.38(a)(5) and (6) and (b)(5) and (6) and 52.39(f), (i), and (j) would remove the phrase "in whole or in part" (referencing states without Indian country and states with Indian country, respectively) while adding language distinguishing the effect that the EPA's approval of a SIP revision would have on sources in the state from the lack of effect on any sources in Indian country within the borders of the state.

Third, language would be added to section 78.1 clarifying that determinations by the EPA Administrator under the CSAPR trading programs that are subject to the part 78 administrative appeal procedures are subject to those procedures whether the source in question participates in a CSAPR trading program under

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a FIP or under an approved SIP revision. This approach is consistent with the approach taken under CAIR FIPs and SIPs and with the EPA's intent in CSAPR, as evidenced by the lack of any proposal or discussion in the CSAPR rulemaking regarding deviation from the historical approach. This approach is also consistent with provisions in sections 52.38 and 52.39 prohibiting approvable SIP revisions from altering certain provisions of the CSAPR trading programs, including the provisions specifying that administrative appeal procedures for determinations of the EPA Administrator under the trading programs are set forth in part 78.

Fourth, the phrase "steam turbine generator" would be changed to "generator" in the list of required equipment in the definition of a "cogeneration system" in sections 97.402, 97.502, 97.602, and 97.702. Absent this correction, a combustion turbine in a facility that uses the combustion turbine in combination with an electricity generator and heat recovery steam generator, but no steam turbine, to produce electricity and useful thermal energy would not meet the definition of a "cogeneration unit." The proposed correction would clarify that a combustion turbine in such a facility should be able to qualify as a "cogeneration unit" (assuming it meets other relevant criteria) under the CSAPR trading programs, as it could

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under the CAIR trading programs. The consistency of this approach with the EPA's intent in the CSAPR rulemaking is evidenced by the lack of any proposal or discussion in that rulemaking regarding the concept of narrowing the set of facilities qualifying for an applicability exemption as cogeneration units. To the contrary, as discussed in the preamble to the CSAPR proposal (75 FR 45307), the definition of "cogeneration system" was created in CSAPR to potentially broaden the set of facilities qualifying for the exemption, specifically by facilitating qualification as "cogeneration units" for certain units that might not meet the required levels of efficiency on an individual basis but that operate as components of multi-unit "cogeneration systems" that do meet the required levels of efficiency.

Fifth, the deadline for recording certain allowance allocations under sections 97.421(j), 97.521(j), 97.621(j), and 97.721(j) would be changed from the "date on which" the EPA receives the necessary allocation information to the date "15 days after the date on which" the EPA receives the information. The EPA's lack of intention in the CSAPR rulemaking to establish the deadline as defined prior to the correction is evidenced by the impracticability of complying with such a deadline.

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Sixth, a proposed change to a description of a required notice under the assurance provisions in sections 97.425(b)(2)(iii)(B), 97.525(b)(2)(iii)(B), 97.625(b)(2)(iii)(B), and 97.725(b)(2)(iii)(B) would modify the phrase "any adjustments" to the phrase "calculations incorporating any adjustments" in order to clarify that the required notice will identify not only any adjustments made to previously noticed calculations, but also the complete calculations with (or without) such adjustments. The intended meaning is clear from the subsequent provisions that use this notice as the point of reference for the complete calculations used in the succeeding administrative procedures.

Finally, the EPA notes that the proposed amendments include updating the name of the rule in the CFR from its name as initially proposed – "Transport Rule" or "TR" – to its name as finalized – "Cross-State Air Pollution Rule" or "CSAPR." This update is intended to reduce confusion and simplify communications regarding the rule by allowing a single name to be used in all contexts.

The EPA invites comment on the proposed regulatory text amendments described above and shown at the end of this notice.

X. Statutory and Executive Order Reviews

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Additional information about these statutes and Executive Orders can be found at http://www2.epa.gov/laws-regulations/laws-and-executive-orders.

A. *Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review*

This action is an economically significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review. Any changes made in response to OMB recommendations have been documented in the docket. The EPA prepared an analysis of the potential costs and benefits associated with this action. This analysis, which is contained in the "Regulatory Impact Analysis for the Proposed Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS" [EPA-452/R-15-009], is available in the docket and is briefly summarized in section VIII of this preamble.

Consistent with Executive Order (EO) 12866 and EO 13563, the EPA estimated the costs and benefits for three regulatory control alternatives: the proposed EGU NO_X ozone-season emissions budgets and more and less stringent alternatives. This proposed action would reduce ozone season NO_X emissions from EGUs in 23 eastern states. Actions taken to comply with the proposed EGU NO_X ozone-season emissions budgets would also reduce emissions of

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other criteria air pollution and hazardous air pollution emissions, including annual NO_X, and CO_2. The benefits associated with these co-pollutant reductions are referred to as co-benefits, as these reductions are not the primary objective of this rule.

The RIA for this proposal analyzed illustrative compliance approaches for implementing the proposed FIPs. This proposal would establish EGU NO_X ozone-season emissions budgets for 23 states and implement these budgets via the existing CSAPR NO_X ozone-season allowance trading program.

The EPA evaluated the costs, benefits, and impacts of implementing the proposed EGU NO_X ozone-season emissions budgets that reflect uniform NO_X costs of $1,300 per ton (see proposed emissions budgets in table VI.1). In addition, the EPA also assessed implementation of other more and less stringent alternative EGU NO_X ozone-season emissions budgets, reflecting uniform NO_X costs of $3,400 per ton and $500 per ton, respectively (see alternative emissions budgets in tables VI.2 and VI.3). The EPA evaluated the impact of implementing these emissions budgets to reduce interstate transport for the 2008 ozone NAAQS in 2017. More details for this assessment can be found in the Regulatory Impact Analysis in the docket for this proposed rule.

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The EPA notes that its analysis of the regulatory control scenarios (i.e., the proposal and more and less stringent alternatives) is illustrative in nature, in part because the EPA proposes to implement the proposed EGU NO_X emissions budgets via a regional NO_X ozone-season allowance trading program. This implementation approach provides utilities with the flexibility to determine their own compliance path. The EPA's assessment develops and analyzes one possible scenario for implementing the NO_X budgets proposed by this action and one possible scenario for implementing the more and less stringent alternatives.

The EPA estimates the costs associated with compliance with the illustrative proposed regulatory control alternative to be approximately $93 million (2011$) annually. These costs represent the private compliance cost of reducing NO_X emissions to comply with the proposal.

In this analysis, the EPA monetized the estimated benefits associated with the reduced exposure to ozone and PM2.5 and co-benefits of decreased emissions of CO_2, but was unable to monetize the co-benefits associated with reducing exposure to mercury, carbon monoxide, and NO_2, as well as ecosystem effects and visibility impairment. In addition, there are expected to be unquantified health and welfare impacts associated with changes in hydrogen chloride. Specifically, the EPA estimated

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combinations of health benefits at discount rates of 3 percent and 7 percent (as recommended by the EPA's *Guidelines for Preparing Economic Analyses* [U.S. EPA, 2014] and OMB's *Circular A-4* [OMB, 2003]) and climate co-benefits at discount rates of 5 percent, 3 percent, 2.5 percent, and 3 percent (95th percentile) (as recommended by the interagency working group). The EPA estimates the monetized ozone-related benefits[121] of the proposal to be $490 million to $790 million (2011$) in 2017 and the PM2.5-related co-benefits[122] of the proposal to be $190 million to $430 million (2011$) using a 3% discount rate and $170 million to $380 million (2011$) using a 7% discount rate. Further, the EPA estimates CO_2-related co-benefits of $6.5 to $66 million (2011$). Additional details on this analysis are provided in the RIA for this proposal. Tables X.A-1, X.A-2, and X.A-3 summarize the quantified human health and climate benefits and the costs of the proposal and the more and less stringent control alternatives.

Table X.A-1 Estimated Health Benefits of Projected 2017 Emissions Reductions for the Proposal and More or Less Stringent Alternatives (millions of 2011$)[1]

	Proposal	More Stringent	Less Stringent
NO_X (as ozone)	$490 to $790	$500 to $820	$140 to $220

[121] The ozone-related health benefits range is based on applying different adult mortality functions (i.e., Smith et al. (2009) and Zanobetti and Schwartz (2008)).
[122] The PM2.5-related health co-benefits range is based on applying different adult mortality functions (i.e., Krewski et al. (2009) and Lepeule et al. (2012)).

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	Proposal	More Stringent	Less Stringent
NO_X (as PM2.5)			
3% Discount Rate	$190 to $430	$190 to $440	$49 to $110
7% Discount Rate	$170 to $380	$170 to $390	$45 to $100
Total			
3% Discount Rate	$670 to $1,200	$690 to $1,300	$190 to $340
7% Discount Rate	$650 to $1,200	$670 to $1,200	$180 to $330

[1] The health benefits range is based on adult mortality functions (e.g., from Krewski et al. (2009) with Smith et al. (2009) to Lepeule et al. (2012) with Zanobetti and Schwartz (2008)).

Table X.A-2 Estimated Global Climate Co-benefits of CO_2 Reductions for the Proposal and More or Less Stringent Alternatives (millions of 2011$)[1]

Discount rate and statistic	Proposal	More Stringent	Less Stringent
5% (average)	$6.5	$6.5	$7.6
3% (average)	$23	$23	$27
2.5% (average)	$35	$35	$41
3% (95th percentile)	$66	$66	$78

[1] The social cost of carbon (SC-CO_2) values are dollar-year and emissions-year specific. SC-CO_2 values represent only a partial accounting of climate impacts.

The EPA combined this information to perform a benefit-cost analysis for this proposal (shown in table VIII.6 and for the more and less stringent alternatives—shown in the RIA in the docket for this proposed rule).

Table X.A-3 Total Costs, Total Monetized Benefits, and Net Benefits of the Proposal in 2017 for U.S. (millions of 2011$)

Climate Co-Benefits	$23
Air Quality Health	$670 to $1200
Total Benefits	$700 to $1200
Annualized Costs	$93
Net Benefits	$600 to $1100
Non-Monetized	Non-monetized climate benefits Reductions in exposure to ambient NO_2 and Reductions in mercury deposition Ecosystem benefits assoc. with reductions Visibility impairment

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There are additional important benefits that the EPA could not monetize. Due to current data and modeling limitations, our estimates of the co-benefits from reducing CO_2 emissions do not include important impacts like ocean acidification or potential tipping points in natural or managed ecosystems. Unquantified benefits also include climate co-benefits from reducing emissions of non-CO_2 GHGs (e.g., nitrous oxide and methane) and co-benefits from reducing direct exposure to SO_2, NO_X, and hazardous air pollution (e.g., mercury), as well as from reducing ecosystem effects and visibility impairment. Based upon the foregoing discussion, it remains clear that the benefits of this proposed action are substantial, and far exceed the costs. Additional details on benefits, costs, and net benefits estimates are provided in the RIA for this proposal.

B. *Paperwork Reduction Act (PRA)*

The information collection activities in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.* The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 2527.01. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

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The information generated by information collection activities under CSAPR is used by the EPA to ensure that affected facilities comply with the emission limits and other requirements. Records and reports are necessary to enable EPA or states to identify affected facilities that may not be in compliance with the requirements. The recordkeeping requirements require only the specific information needed to determine compliance. These recordkeeping and reporting requirements are established pursuant to CAA sections 110(a)(2)(D) and (c) and 301(a) (42 U.S.C. 7410(a)(2)(D) and (c) and 7601(a)) and are specifically authorized by CAA section 114 (42 U.S.C. 7414). Reported data may also be used for other regulatory and programmatic purposes. All information submitted to the EPA for which a claim of confidentiality is made will be safeguarded according to EPA policies in 40 CFR part 2, subpart B, Confidentiality of Business Information.

All of the EGUs that would be subject to changed information collection requirements under this proposed rule are already subject to information collection requirements under CSAPR. Most of these EGUs also are already subject to information collection requirements under the Acid Rain Program (ARP) established under Title IV of the 1990 Clean Air Act Amendments. Both CSAPR and the ARP have existing approved ICRs:

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EPA ICR Number 2391.03/OMB Control Number 2060-0667 (CSAPR) and EPA ICR Number 1633.16/OMB Control Number 2060-0258 (ARP). The burden and costs of the information collection requirements covered under the CSAPR ICR are estimated as incremental to the information collection requirements covered under the ARP ICR. Most of the information used to estimate burden and costs in this ICR was developed for the existing CSAPR and ARP ICRs.

This proposed rule would change the universe of sources subject to certain information collection requirements under CSAPR but would not change the substance of any CSAPR information collection requirements. The burden and costs associated with the proposed changes in the reporting universe are estimated as reductions from the burden and costs under the existing CSAPR ICR. (This proposed rule would not change any source's information collection requirements with respect to the ARP.) The EPA intends to incorporate the burden and costs associated with the proposed changes in the reporting universe under this rule into the next renewal of the CSAPR ICR.

Respondents/affected entities: Entities potentially affected by this proposed action are EGUs in the states of Florida, Kansas, and South Carolina that meet the applicability criteria for the CSAPR NO_X Ozone-Season Trading Program in 40 CFR 97.404.

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Respondent's obligation to respond: Mandatory (sections 110(a) and 301(a) of the Clean Air Act).

Estimated number of respondents: 116 sources in Florida, Kansas, and South Carolina with one or more EGUs.

Frequency of response: Quarterly, occasionally.

Total estimated burden: reduction of 14,064 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: reduction of $1,472,047 (per year), includes reduction of $450,951 operation and maintenance costs.

The burden and cost estimates above reflect the reduction in burden and cost for Florida sources with EGUs that would no longer be required to report NO_X mass emissions and heat input data for the ozone season to the EPA under the proposed rule and that are not subject to similar information collection requirements under the Acid Rain Program. Because these EGUs would no longer need to collect NO_X emissions or heat input data under 40 CFR part 75, the estimates above also reflect the reduction in burden and cost to collect and quality assure these data and to maintain the associated monitoring equipment.

The EPA estimates that the proposed rule would cause no change in information collection burden or cost for EGUs in Kansas that would be required to report NO_X mass emissions and heat input data for the ozone season to the EPA or for EGUs in

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South Carolina that would no longer be required to report NO_X emissions and heat input data for the ozone season to the EPA. The EGUs in both Kansas and South Carolina already are and would remain subject to requirements to report NO_X mass emissions and heat input data for the entire year to the EPA under the CSAPR NO_X Annual Trading Program, and the requirements related to ozone season reporting are a subset of the requirements related to annual reporting. Similarly, the EPA estimates that the proposed rule would cause no change in information collection burden or cost for EGUs in Florida that are subject to the Acid Rain Program because of the close similarity between the information collection requirements under CSAPR and under the Acid Rain Program.

More information on the ICR analysis is included in the docket for this rule.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the

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EPA using the docket identified at the beginning of this rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to oria_submissions@omb.eop.gov, Attention: Desk Officer for the EPA. Because OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The EPA will respond to any ICR-related comments in the final rule. The information collection requirements in the proposed rule have been submitted for approval to OMB under the PRA. The information collection requirements are not enforceable until OMB approves them. The information collection activities in this proposed rule include monitoring and the maintenance of records.

E. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. The small entities subject to the requirements of this action are small businesses, small organizations, and small governmental jurisdictions.

The EPA has lessened the impacts for small entities by excluding all units smaller than 25 MWe. This exclusion, in

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addition to the exemptions for cogeneration units and solid waste incineration units, eliminates the burden of higher costs for a substantial number of small entities located in the 23 states for which the EPA is proposing FIPs.

Within these states, the EPA identified a total of 318 potentially affected EGUs (i.e., greater than 25 MWe) warranting examination in its RFA analysis. Of these, EPA identified 16 potentially affected EGUs that are owned by 7 entities that met the Small Business Administration's criteria for identifying small entities. The EPA estimated the annualized net compliance cost to these 7 small entities to be approximately -$38.3 million in 2017, or savings of $38.3 million. The fact that the net compliance costs for all entities are actually net savings does not mean that each small entity would benefit from the proposal to update CSAPR. The net savings are driven by entities that are able to increase their revenues by increasing generation. Of the 7 small entities considered in this analysis, 1 entity may experience compliance costs greater than 1 or 3 percent of generation revenues in 2017. Since this entity is not projected to operate in the base case, we are unable to compare the estimated compliance costs to base case generation revenues. However, we note that this entity is located in a cost of service market, where typically we expect entities should be

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able to recover all of their costs of complying with the proposal.

EPA has concluded that there is no significant economic impact on a substantial number of small entities (No SISNOSE) for this rule. Details of this analysis are presented in the RIA, which is in the public docket.

F. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. However, the EPA analyzed the economic impacts of the proposal on government entities. According to EPA's analysis, the total net economic impact on government owned entities (state- and municipality-owned utilities and subdivisions) is expected to be negative (i.e., cost savings) in 2014. Note that we expect the proposal to potentially have an impact on only one category of government-owned entities (municipality-owned entities). This analysis does not examine potential indirect economic impacts associated with the proposal, such as employment effects in industries providing fuel and pollution control equipment, or the potential effects of electricity price increases on government entities. For more information on the estimated

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impact on government entities, refer to the RIA, which is in the public docket.

E. *Executive Order 13132: Federalism*

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. *Executive Order 13175: Consultation and Coordination with Indian Tribal Governments*

This action has tribal implications. However, it will neither impose substantial direct compliance costs on federally recognized tribal governments, nor preempt tribal law.

This action proposes to implement EGU NO_X ozone season emissions reductions in 23 eastern states. However, at this time, none of the existing or planned EGUs affected by this rule are owned by tribes or located in Indian country. This action may have tribal implications if a new affected EGU is built in Indian country. Additionally, tribes have a vested interest in how this proposed rule would affect air quality.

In developing CSAPR, which was promulgated on July 6, 2011 to address interstate transport of ozone pollution under the

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1997 ozone NAAQS,[123] the EPA consulted with tribal officials under the EPA Policy on Consultation and Coordination with Indian Tribes early in the process of developing that regulation to permit them to have meaningful and timely input into its development. A summary of that consultation is provided in 76 FR 48346 (August 8, 2011).

EPA received comments from several tribal commenters regarding the availability of CSAPR allowance allocations to new units in Indian country. EPA responded to these comments by instituting Indian country new unit set-asides in the final CSAPR. In order to protect tribal sovereignty, these set-asides are managed and distributed by the federal government regardless of whether CSAPR in the adjoining or surrounding state is implemented through a FIP or SIP. While there are no existing affected EGUs in Indian country covered by this proposal, the Indian country set-asides will ensure that any future new units built in Indian country will be able to obtain the necessary allowances. This proposal maintains the Indian country new unit set-aside and adjusts the amounts of allowances in each set-aside according to the same methodology of the original CSAPR rule.

[123] CSAPR also addressed interstate transport of fine particulate matter (PM2.5) under the 1997 and 2006 PM2.5 NAAQS.

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The EPA has informed tribes of our development of this proposal through a National Tribal Air Association – EPA air policy conference call (January 29, 2015). The EPA plans to further consult with tribal officials under the EPA Policy on Consultation and Coordination with Indian Tribes early in the process of developing this regulation to permit them to have meaningful and timely input into its development. The EPA will facilitate this consultation before finalizing this proposed rule.

As required by section 7(a), the EPA's Tribal Consultation Official has certified that the requirements of the executive order have been met in a meaningful and timely manner. A copy of the certification is included in the docket for this action.

G. *Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks*

The EPA interprets EO 13045 (62 FR 19885, April 23, 1997) as applying to those regulatory actions that concern health or safety risks, such that the analysis required under section 5-501 of the Order has the potential to influence the regulation. This action is not subject to EO 13045 because it does not involve decisions on environmental health or safety risks that may disproportionately affect children. The EPA believes that

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the ozone-related benefits, $PM_{2.5}$-related co-benefits, and CO_2-related co-benefits would further improve children's health.

H. *Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use*

This action, which is a significant regulatory action under EO 12866, is likely to have a significant effect on the supply, distribution, or use of energy. The EPA notes that one aspect of this proposal that may affect energy supply, disposition or use is the EPA's proposing and taking comment on a range of options with respect to use of 2015 vintage and 2016 vintage CSAPR NO_X ozone-season allowances for compliance with 2017 and later ozone season requirements. The EPA has prepared a Statement of Energy Effects for the proposed regulatory control alternative as follows. We estimate a much less than 1 percent change in retail electricity prices on average across the contiguous U.S. in 2017, and a much less than 1 percent reduction in coal-fired electricity generation in 2017 as a result of this rule. The EPA projects that utility power sector delivered natural gas prices will change by less than 1 percent in 2017. For more information on the estimated energy effects, refer to the RIA, which is in the public docket.

I. *National Technology Transfer and Advancement Act (NTTAA)*

This rulemaking does not involve technical standards.

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J. *Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*

The EPA believes the human health or environmental risk addressed by this action will not have potential disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous populations.

The EPA notes that this action proposes to update CSAPR to reduce interstate ozone transport with respect to the 2008 ozone NAAQS. This rule uses EPA's authority in CAA section 110(a)(2)(d) to reduce (nitrogen oxides) NO_X pollution that significantly contributes to downwind ozone nonattainment or maintenance areas. As a result, the rule will reduce exposures to ozone in the most-contaminated areas (i.e., areas that are not meeting the 2008 ozone National Ambient Air Quality Standards (NAAQS)). In addition, the rule separately identifies both nonattainment areas and maintenance areas. This requirement reduces the likelihood that areas close to the level of the standard will exceed the current health-based standards in the future. The EPA proposes to implement these emission reductions using the CSAPR EGU NO_X ozone-season emissions trading program with assurance provisions.

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EPA recognizes that many environmental justice communities have voiced concerns in the past about emission trading and the potential for any emission increases in any location. The EPA believes that CSAPR mitigated these concerns and that this proposal, which applies the CSAPR framework to reduce interstate ozone pollution and implement these reductions, will also minimize community concerns. The EPA seeks comment from communities on this proposal.

Ozone pollution from power plants have both local and regional components: part of the pollution in a given location—even in locations near emission sources—is due to emissions from nearby sources and part is due to emissions that travel hundreds of miles and mix with emissions from other sources.

It is important to note that the section of the Clean Air Act providing authority for this rule, section 110(a)(2)(D), unlike some other provisions, does not dictate levels of control for particular facilities. CSAPR allows sources to trade allowances with other sources in the same or different states while firmly constraining any emissions shifting that may occur by requiring a strict emission ceiling in each state (the assurance level). In addition, assurance provisions in the rule outline the allowance surrender penalties for failing to meet the assurance level; there are additional allowance penalties as

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well as financial penalties for failing to hold an adequate number of allowances to cover emissions.

This approach reduces EGU emissions in each state that significantly contribute to downwind nonattainment or maintenance areas, while allowing power companies to adjust generation as needed and ensure that the country's electricity needs will continue to be met. EPA maintains that the existence of these assurance provisions, including the penalties imposed when triggered, will ensure that state emissions will stay below the level of the budget plus variability limit.

In addition, all sources must hold enough allowances to cover their emissions. Therefore, if a source emits more than its allocation in a given year, either another source must have used less than its allocation and be willing to sell some of its excess allowances, or the source itself had emitted less than its allocation in one or more previous years (i.e., banked allowances for future use).

In summary, the CSAPR minimizes community concerns about localized hot spots and reduces ambient concentrations of pollution where they are most needed by sensitive and vulnerable populations by: considering the science of ozone transport to set strict state emissions budgets to reduce significant contributions to ozone nonattainment and maintenance (i.e., the

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most polluted) areas; implementing air quality-assured trading; requiring any emissions above the level of the allocations to be offset by emission decreases; and imposing strict penalties for sources that contribute to a state's exceedance of its budget plus variability limit. In addition, it is important to note that nothing in this final rule allows sources to violate their title V permit or any other federal, state, or local emissions or air quality requirements.

In addition, it is important to note that CAA section 110(a)(2)(d), which addresses transport of criteria pollutants between states, is only one of many provisions of the CAA that provide EPA, states, and local governments with authorities to reduce exposure to ozone in communities. These legal authorities work together to reduce exposure to these pollutants in communities, including for minority, low-income, and tribal populations, and provide substantial health benefits to both the general public and sensitive sub-populations.

The EPA has informed communities of our development of this proposal through an Environmental Justice community call (January 28, 2015) and a National Tribal Air Association – EPA air policy conference call (January 29, 2015). The EPA plans to further consult with communities early in the process of developing this regulation to permit them to have meaningful and

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timely input into its development. The EPA will facilitate this engagement before finalizing this proposed rule.

K. *Determinations Under Section 307(b)(1) and (d)*

Section 307(b)(1) of the CAA indicates which Federal Courts of Appeal have venue for petitions of review of final actions by EPA. This section provides, in part, that petitions for review must be filed in the Court of Appeals for the District of Columbia Circuit if (i) the agency action consists of "nationally applicable regulations promulgated, or final action taken, by the Administrator," or (ii) such action is locally or regionally applicable, if "such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination."

The EPA proposes to find that any final action related to this rulemaking is "nationally applicable" or of "nationwide scope and effect" within the meaning of section 307(b)(1). Through this rulemaking action, the EPA interprets section 110 of the CAA, a provision which has nationwide applicability. In addition, the proposed rule would apply to 23 States. The proposed rule is also based on a common core of factual findings and analyses concerning the transport of pollutants between the different states subject to it. For these reasons, the

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Administrator proposes to determine that any final action related to the proposed rule is of nationwide scope and effect for purposes of section 307(b)(1). Thus, pursuant to section 307(b) any petitions for review of any final actions regarding the rulemaking would be filed in the Court of Appeals for the District of Columbia Circuit within 60 days from the date any final action is published in the Federal Register.

In addition, pursuant to sections 307(d)(1)(C) and 307(d)(1)(V) of the CAA, the Administrator proposes to determine that this action is subject to the provisions of section 307(d). CAA section 307(d)(1)(B) provides that section 307(d) applies to, among other things, to "the promulgation or revision of an implementation plan by the Administrator under CAA section 110(c)." 42 U.S.C. 7407(d)(1)(B). Under section 307(d)(1)(V), the provisions of section 307(d) also apply to "such other actions as the Administrator may determine." 42 U.S.C. 7407(d)(1)(V). The Agency has complied with procedural requirements of CAA section 307(d) during the course of this rulemaking.

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List of Subjects in 40 CFR Parts 52, 78, and 97.

Environmental protection, Administrative practice and procedure, Air pollution control, Electric power plants, Nitrogen oxides, Reporting and record keeping requirements.

Dated:

Gina McCarthy,

Administrator.

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For the reasons stated in the preamble, parts 52, 78, and 97 of chapter I of title 40 of the *Code of Federal Regulations* are proposed to be amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

§§52.38, 52.39, 52.54, 52.55, 52.184, 52.540, 52.584, 52.585, 52.731, 52.732, 52.789, 52.790, 52.840, 52.841, 52.882, 52.883, 52.940, 52.941, 52.984, 52.1084, 52.1085, 52.1186, 52.1187, 52.1240, 52.1241, 52.1284, 52.1326, 52.1327, 52.1428, 52.1429, 52.1584, 52.1585, 52.1684, 52.1685, 52.1784, 52.1785, 52.1882, 52.1883, 52.1930, 52.2040, 52.2041, 52.2140, 52.2141, 52.2240, 52.2241, 52.2283, 52.2284, 52.2440, 52.2441, 52.2540, 52.2541, 52.2587, and 52.2588 [Amended]

2. Sections 52.38, 52.39, 52.54, 52.55, 52.184, 52.540, 52.584, 52.585, 52.731, 52.732, 52.789, 52.790, 52.840, 52.841, 52.882, 52.883, 52.940, 52.941, 52.984, 52.1084, 52.1085, 52.1186, 52.1187, 52.1240, 52.1241, 52.1284, 52.1326, 52.1327, 52.1428, 52.1429, 52.1584, 52.1585, 52.1684, 52.1685, 52.1784, 52.1785, 52.1882, 52.1883, 52.1930, 52.2040, 52.2041, 52.2140, 52.2141, 52.2240, 52.2241, 52.2283, 52.2284, 52.2440, 52.2441, 52.2540, 52.2541, 52.2587, and 52.2588 are amended by removing

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"TR Federal Implementation Plan" wherever it appears and adding in its place "CSAPR Federal Implementation Plan", by removing "TR NO_X" wherever it appears and adding in its place "CSAPR NO_X", and by removing "TR SO_2" wherever it appears and adding in its place "CSAPR SO_2".

§§52.540, 52.840, 52.841, 52.882, 52.883, 52.984, 52.1186, 52.1187, 52.1240, 52.1241, 52.1284, 52.1428, 52.1429, 52.1684, 52.1685, 52.1784, 52.1785, 52.2140, 52.2141, 52.2283, 52.2284, 52.2587, and 52.2588 [Amended]

3. Sections 52.540, 52.840, 52.841, 52.882, 52.883, 52.984, 52.1186, 52.1187, 52.1240, 52.1241, 52.1284, 52.1428, 52.1429, 52.1684, 52.1685, 52.1784, 52.1785, 52.2140, 52.2141, 52.2283, 52.2284, 52.2587, and 52.2588 are amended by removing "correcting in part the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan" wherever it appears and adding in its place "correcting the SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan".

Subpart A—General Provisions

§ 52.36 [Amended]

4. Section 52.36 is amended in paragraph (e)(1)(i) by removing "paragraphs (a) through (e)" and adding in its place "paragraphs (a) through (c)".

5. Section 52.38 is amended by:

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a. Revising the section heading;

b. In paragraph (a)(2), by removing "the sources in the following States" and adding in its place "sources in each of the following States";

c. In paragraph (a)(3)(ii), by adding "the" before "CSAPR NO_X Annual trading budget";

d. In paragraph (a)(3)(v)(A), by removing "paragraph" and adding in its place "paragraphs";

e. In the table in paragraph (a)(4)(i)(B), by removing "annual" and adding in its place "Annual", and by removing "administrator" and adding in its place "the Administrator";

f. In paragraph (a)(4)(ii), by removing "for the first control period" and adding in its place "applicable to the first control period";

g. In paragraph (a)(5) introductory text, by removing "in whole or in part, as appropriate," and by removing "paragraphs (a)(1) through (4) of this section" and adding in its place "paragraphs (a)(1) through (4) of this section with regard to sources in the State but not sources in any Indian country within the borders of the State";

h. In the table in paragraph (a)(5)(i)(B), by removing "annual" and adding in its place "Annual", and by removing "administrator" and adding in its place "the Administrator";

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i. In paragraph (a)(5)(iv), by adding after "97.412(b)" the words "of this chapter";

j. In paragraph (a)(5)(v), by removing "97.425, and" and adding in its place "and 97.425 of this chapter and", and by adding after "other provisions" the words "of subpart AAAAA of part 97 of this chapter";

k. In paragraph (a)(5)(vi), by removing "paragraphs (a)(5)(i) and (ii)" and adding in its place "paragraph (a)(5)(i)";

l. In paragraph (a)(6), by removing "in whole or in part, as appropriate,", by removing "described in paragraphs (a)(1) through (5)" and adding in its place "set forth in paragraphs (a)(1) through (4)", and by removing "the sources" and adding in its place "sources";

m. In paragraph (a)(7), by removing "a State" and adding in its place "the State";

n. In paragraph (b)(1), by adding "subpart BBBBB of" before "part 97";

o. Revising paragraph (b)(2);

p. Redesignating paragraph (b)(3) as paragraph (b)(3)(i); in redesignated paragraph (b)(3)(i), by further redesignating paragraphs (i) through (v) as paragraphs (A) through (E); and in

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redesignated paragraph (b)(3)(i)(E), by further redesignating paragraphs (A) and (B) as paragraphs (*1*) and (*2*);

q. In redesignated paragraph (b)(3)(i) introductory text, by removing "paragraph (b)(2)" and adding in its place "paragraph (b)(2)(i) or (ii)";

r. In redesignated paragraph (b)(3)(i)(B), by adding "the" before "CSAPR NO_X Ozone Season trading budget";

s. In redesignated paragraph (b)(3)(i)(E)(*1*), by removing "paragraph (b)(3)(i) through (iv)" and adding in its place "paragraphs (b)(3)(i)(A) through (D)";

t. In redesignated paragraph (b)(3)(i)(E)(*2*), by removing "paragraph (b)(3)(v)(A)" and adding in its place "paragraph (b)(3)(i)(E)(*1*)";

u. Adding a new paragraph (b)(3)(ii);

v. In paragraph (b)(4) introductory text, by removing "paragraph (b)(2)" and adding in its place "paragraph (b)(2)(ii) or (iii)";

w. In paragraph (b)(4)(i), by removing "§§" and adding in its place "§", by adding after "chapter" the words "with regard to the State", and by removing "whenever" and adding in its place "wherever";

x. Revising paragraph (b)(4)(ii) introductory text;

y. In paragraph (b)(4)(ii)(B), by revising the table;

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z. In paragraph (b)(5) introductory text, by removing "paragraph (b)(2)" and adding in its place "paragraph (b)(2)(ii) or (iii)", by removing "in whole or in part, as appropriate,", and by removing "paragraphs (b)(1) through (4) of this section" and adding in its place "paragraphs (b)(1) through (4) of this section with regard to sources in the State but not sources in any Indian country within the borders of the State";

aa. In paragraph (b)(5)(i), by removing "§§" and adding in its place "§", by adding after "chapter" the words "with regard to the State", and by removing "whenever" and adding in its place "wherever";

bb. Revising paragraph (b)(5)(ii) introductory text;

cc. In paragraph (b)(5)(ii)(B), by removing "auction of CSAPR" and adding in its place "auctions of CSAPR", and by revising the table;

dd. In paragraph (b)(5)(ii)(C), by removing "any control period" and adding in its place "any such control period";

ee. In paragraph (b)(5)(iii), by adding a comma after "May adopt";

ff. In paragraph (b)(5)(v), by adding after "97.512(b)" the words "of this chapter";

gg. In paragraph (b)(5)(vi), by removing "97.525, and" and adding in its place "and 97.525 of this chapter and", and by

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adding after “other provisions” the words “of subpart BBBBB of part 97 of this chapter”;

hh. In paragraph (b)(5)(vii), by removing “paragraph (b)(5)(i) through (v)” and adding in its place “paragraph (b)(5)(i) or (ii) of this section and paragraphs (b)(5)(iii) through (v)”, by removing “paragraphs (5)(ii)(B) and (C)” and adding in its place “paragraphs (b)(5)(ii)(B) and (C)”, and by removing “paragraphs (b)(5)(ii) and (iii)” and adding in its place “paragraph (b)(5)(i) or (ii)”;

ii. In paragraph (b)(6), by removing “in whole or in part, as appropriate,”, and by removing “paragraphs (b)(1) through (5)” and adding in its place “paragraphs (b)(1) through (4)”; and

jj. In paragraph (b)(7), by removing “a State” and adding in its place “the State”;

to read as follows:

§ 52.38 What are the requirements of the Federal Implementation Plans (FIPs) for the Cross-State Air Pollution Rule (CSAPR) relating to emissions of nitrogen oxides?

* * * * *

(b) * * *

(2) The provisions of subpart BBBBB of part 97 of this chapter apply to sources in each of the following States and

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Indian country located within the borders of such States with regard to emissions in the following years:

(i) With regard to emissions in 2015 and 2016 only, Florida and South Carolina;

(ii) With regard to emissions in 2015 and each subsequent year, Alabama, Arkansas, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, Virginia, West Virginia, and Wisconsin; and

(iii) With regard to emissions in 2017 and each subsequent year, Kansas.

(3) * * *

(ii) Notwithstanding the provisions of paragraph (b)(1) of this section, a State other than Georgia listed in paragraph (b)(2)(ii) or (iii) of this section may adopt and include in a SIP revision, and the Administrator will approve, as CSAPR NO_X Ozone Season allowance allocation provisions replacing the provisions in §97.511(a) of this chapter with regard to the State and the control period in 2018, a list of CSAPR NO_X Ozone Season units and the amount of CSAPR NO_X Ozone Season allowances allocated to each unit on such list, provided that the list of units and allocations meets the following requirements:

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(A) All of the units on the list must be units that are in the State and commenced commercial operation before January 1, 2015;

(B) The total amount of CSAPR NO_X Ozone Season allowance allocations on the list must not exceed the amount, under §97.510(a) of this chapter for the State and the control period in 2018, of the CSAPR NO_X Ozone Season trading budget minus the sum of the new unit set-aside and Indian country new unit set-aside;

(C) The list must be submitted electronically in a format specified by the Administrator; and

(D) The SIP revision must not provide for any change in the units and allocations on the list after approval of the SIP revision by the Administrator and must not provide for any change in any allocation determined and recorded by the Administrator under subpart BBBBB of part 97 of this chapter;

(E) Provided that:

(*1*) By November 15, 2016, the State must notify the Administrator electronically in a format specified by the Administrator of the State's intent to submit to the Administrator a complete SIP revision meeting the requirements of paragraphs (b)(3)(ii)(A) through (D) of this section by April 1, 2017; and

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(*2*) The State must submit to the Administrator a complete SIP revision described in paragraph (b)(3)(ii)(E)(*1*) of this section by April 1, 2017.

(4) * * *

(ii) The State may adopt, as CSAPR NO_X Ozone Season allowance allocation or auction provisions replacing the provisions in §§97.511(a) and (b)(1) and 97.512(a) of this chapter with regard to the State and the control period in 2017 or any subsequent year or, for Kansas, 2019 or any subsequent year, any methodology under which the State or the permitting authority allocates or auctions CSAPR NO_X Ozone Season allowances and may adopt, in addition to the definitions in §97.502 of this chapter, one or more definitions that shall apply only to terms as used in the adopted CSAPR NO_X Ozone Season allowance allocation or auction provisions, if such methodology—

* * * * *

(B) * * *

Year of the control period for which CSAPR NO_X Ozone Season allowances are allocated or auctioned	**Deadline for submission of allocations or auction results to the Administrator**
2017	November 1, 2016.
2018	November 1, 2016.

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2019	June 1, 2018.
2020	June 1, 2018.
2021	June 1, 2019.
2022	June 1, 2019.
2023 and any year thereafter	June 1 of the fourth year before the year of the control period.

* * * * *

(5) * * *

(ii) May adopt, as CSAPR NO_X Ozone Season allowance allocation provisions replacing the provisions in §§97.511(a) and (b)(1) and 97.512(a) of this chapter with regard to the State and the control period in 2019 or any subsequent year or, for Georgia, 2017 or any subsequent year, any methodology under which the State or the permitting authority allocates or auctions CSAPR NO_X Ozone Season allowances and that—

* * * * *

(B) * * *

Year of the control period for which CSAPR NO_X Ozone Season allowances are allocated or auctioned	**Deadline for submission of allocations or auction results to the Administrator**

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2017	November 1, 2016.
2018	November 1, 2016.
2019	June 1, 2018.
2020	June 1, 2018.
2021	June 1, 2019.
2022	June 1, 2019.
2023 and any year thereafter	June 1 of the fourth year before the year of the control period.

* * * * *

§52.39 What are the requirements of the Federal Implementation Plans (FIPs) for the Cross-State Air Pollution Rule (CSAPR) relating to emissions of sulfur dioxide?

6. Section 52.39 is amended by:

a. Revising the section heading as set forth above;

b. In paragraph (d)(2), by adding "the" before "CSAPR SO_2 Group 1 trading budget";

c. In paragraph (d)(5)(i), by removing "paragraph (d)(1) through (4)" and adding in its place "paragraphs (d)(1) through (4)";

d. In paragraph (e)(1) introductory text, by adding after "with regard to" the words "the State and";

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e. In paragraph (e)(1)(ii), by removing “auction of CSAPR” and adding in its place “auctions of CSAPR”, and by removing in the table “administrator” and adding in its place “the Administrator”;

f. In paragraph (f) introductory text, by removing “in whole or in part, as appropriate,”, and by removing “paragraphs (a), (b), (d), and (e) of this section” and adding in its place “paragraphs (a), (b), (d), and (e) of this section with regard to sources in the State but not sources in any Indian country within the borders of the State”;

g. In paragraph (f)(1) introductory text, by adding after “with regard to” the words “the State and”, and by removing “and any subsequent year” and adding in its place “or any subsequent year”;

h. In paragraph (f)(1)(i), by removing “for such control period” and adding in its place “for any such control period”;

i. In paragraph (f)(1)(ii), by removing “auction of CSAPR” and adding in its place “auctions of CSAPR”, and by removing in the table “administrator” and adding in its place “the Administrator”;

j. In paragraph (f)(1)(iv), by removing “paragraphs (f)(2)(ii) and (iii)” and adding in its place “paragraphs (f)(1)(ii) and (iii)”;

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k. In paragraph (f)(4), by adding after "97.612(b)" the words "of this chapter";

l. In paragraph (f)(5), by removing "97.625, and" and adding in its place "and 97.625 of this chapter and", and by adding after "other provisions" the words "of subpart CCCCC of part 97 of this chapter";

m. In paragraph (f)(6), by removing "hold an auction under paragraph (f)(1)(ii) and (iii)" and adding in its place "hold an auction under paragraph (f)(1)";

n. In paragraph (g) introductory text, by adding after "with regard to" the words "the State and";

o. In paragraph (g)(2), by adding "the" before "CSAPR SO_2 Group 2 trading budget";

p. In paragraph (g)(5)(i), by removing "paragraph (g)(1) through (4)" and adding in its place "paragraphs (g)(1) through (4)";

q. In paragraph (h)(1) introductory text, by adding after "with regard to" the words "the State and", and by removing "and any subsequent year" and adding in its place "or any subsequent year";

r. In paragraph (h)(1)(ii), by removing "auction of CSAPR" and adding in its place "auctions of CSAPR", and by removing in

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the table “administrator” and adding in its place “the Administrator”;

s. In paragraph (h)(2), by removing “hold an auction under paragraph (h)(1)(ii) and (iii)” and adding in its place “hold an auction under paragraph (h)(1)”;

t. In paragraph (i) introductory text, by removing “in whole or in part, as appropriate,”, and by removing “paragraphs (a), (c), (g), and (h) of this section” and adding in its place “paragraphs (a), (c), (g), and (h) of this section with regard to sources in the State but not sources in any Indian country within the borders of the State”;

u. In paragraph (i)(1) introductory text, by adding after “with regard to” the words “the State and”, and by removing “and any subsequent year” and adding in its place “or any subsequent year”;

v. In paragraph (i)(1)(ii), by removing “auction of CSAPR” and adding in its place “auctions of CSAPR”, and by removing in the table “administrator” and adding in its place “the Administrator”;

w. In paragraph (i)(4), by adding after “97.712(b)” the words “of this chapter”;

x. In paragraph (i)(5), by removing “97.725, and” and adding in its place “and 97.725 of this chapter and”, and by

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adding after "other provisions" the words "of subpart DDDDD of part 97 of this chapter";

y. In paragraph (i)(6), by removing "hold an auction under paragraphs (i)(1)(ii) and (iii)" and adding in its place "hold an auction under paragraph (i)(1)";

z. In paragraph (j), by removing "in whole or in part, as appropriate,", by adding after "CSAPR Federal Implementation Plan" the words "set forth in paragraphs (a), (b), (d), and (e) of this section or paragraphs (a), (c), (g), and (h) of this section, as applicable", and by removing "paragraph (b) and (c)" and adding in its place "paragraph (b) or (c)"; and

aa. In paragraph (k), by removing "a State" and adding in its place "the State".

Subpart B—Alabama

§ 52.54 [Amended]

7. Section 52.54 is amended in paragraph (b)(2) by removing "the" before "Alabama's SIP revision".

Subpart K—Florida

8. Section 52.540 is amended by adding a new paragraph (c) to read as follows:

§ 52.540 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

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(c) Notwithstanding paragraph (a) of this section, no source or unit located in the State of Florida or Indian country within the borders of the State shall be required under paragraph (a) of this section to comply with the requirements set forth under the CSAPR NO_X Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter with regard to emissions after 2016.

Subpart R—Kansas

9. Section 52.882 is amended by revising paragraph (b) to read as follows:

§ 52.882 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(b)(1) The owner and operator of each source and each unit located in the State of Kansas and Indian country within the borders of the State and for which requirements are set forth under the CSAPR NO_X Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter must comply with such requirements. The obligation to comply with such requirements with regard to sources and units in the State will be eliminated by the promulgation of an approval by the Administrator of a revision to Kansas' State Implementation Plan (SIP) as correcting the

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SIP's deficiency that is the basis for the CSAPR Federal Implementation Plan under §52.38(b), except to the extent the Administrator's approval is partial or conditional. The obligation to comply with such requirements with regard to sources and units located in Indian country within the borders of the State will not be eliminated by the promulgation of an approval by the Administrator of a revision to Kansas' SIP.

(2) Notwithstanding the provisions of paragraph (b)(1) of this section, if, at the time of the approval of Kansas' SIP revision described in paragraph (b)(1) of this section, the Administrator has already started recording any allocations of CSAPR NO_X Ozone Season allowances under subpart BBBBB of part 97 of this chapter to units in the State for a control period in any year, the provisions of subpart BBBBB of part 97 of this chapter authorizing the Administrator to complete the allocation and recordation of CSAPR NO_X Ozone Season allowances to units in the State for each such control period shall continue to apply, unless provided otherwise by such approval of the State's SIP revision.

Subpart X—Michigan

§ 52.1187 [Amended]

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10. Section 52.1187 is amended in paragraph (c)(2) by removing "Maryland's SIP revision" and adding in its place "Michigan's SIP revision".

Subpart PP—South Carolina

11. Section 52.2140 is amended by adding a new paragraph (b)(3) to read as follows:

§ 52.2140 Interstate pollutant transport provisions; What are the FIP requirements for decreases in emissions of nitrogen oxides?

* * * * *

(b) * * *

(3) Notwithstanding paragraph (b)(1) of this section, no source or unit located in the State of South Carolina or Indian country within the borders of the State shall be required under paragraph (b)(1) of this section to comply with the requirements set forth under the CSAPR NO_X Ozone Season Trading Program in subpart BBBBB of part 97 of this chapter with regard to emissions after 2016.

PART 78—APPEAL PROCEDURES

12. The authority citation for part 78 continues to read as follows:

Authority: 42 U.S.C. 7401, 7403, 7410, 7411, 7426, 7601, and 7651, *et seq.*

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§§78.1 and 78.4 [Amended]

13. Sections 78.1 and 78.4 are amended by removing "TR NO_X" wherever it appears and adding in its place "CSAPR NO_X", and by removing "TR SO_2" wherever it appears and adding in its place "CSAPR SO_2".

14. Section 78.1 is amended by:

a. In paragraph (a)(1), by adding after "part 97 of this chapter" the words "or State regulations approved under §52.38(a)(4) or (5) or (b)(4) or (5) of this chapter or § 52.39(e), (f), (h), or (i) of this chapter", and by adding a new third sentence at the end of the paragraph;

b. Adding a new paragraph (b)(14)(viii); and

c. In paragraphs (b)(16)(ii), (iii), and (v), by removing "SO_2 Group 1" and adding in its place "SO_2 Group 2";

to read as follows:

§ 78.1 Purpose and scope.

(a)(1) * * * All references in paragraph (b) of this section and in §78.3 to subpart AAAAA of part 97 of this chapter, subpart BBBBB of part 97 of this chapter, subpart CCCCC of part 97 of this chapter, and subpart DDDDD of part 97 of this chapter shall be read to include the comparable provisions in State regulations approved under §52.38(a)(4) or (5) of this chapter, §52.38(b)(4) or (5) of this chapter, §52.39(e) or (f)

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of this chapter, and §52.39(h) or (i) of this chapter, respectively.

* * * * *

(b) * * *

(14) * * *

(viii) The determination of the tonnage equivalent of a CSAPR NO_X Ozone Season allowance under § 97.524(f) of this chapter.

* * * * *

§ 78.4 [Amended]

15. Section 78.4 is amended in paragraph (a)(1)(i) by removing "a affected" and adding in its place "an affected", by adding "or" before "CSAPR SO_2 Group 2 unit", and by removing ", or a unit for which a TR opt-in application is submitted and not withdrawn".

PART 97—FEDERAL NO_X BUDGET TRADING PROGRAM, CAIR NO_X AND SO_2 TRADING PROGRAMS, AND CSAPR NO_X AND SO_2 TRADING PROGRAMS

16. The heading of part 97 is revised to read as set forth above.

17. The authority citation for part 97 continues to read as follows:

Authority: 42 U.S.C. 7401, 7403, 7410, 7426, 7601, and 7651, *et seq.*

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§§97.401 through 97.735 [Amended]

18. Sections 97.401 through 97.735 are amended by removing "Transport Rule (TR)" wherever it appears and adding in its place "Cross-State Air Pollution Rule (CSAPR)", by removing "TR NO_X" wherever it appears and adding in its place "CSAPR NO_X", and by removing "TR SO_2" wherever it appears and adding in its place "CSAPR SO_2".

Subpart AAAAA—CSAPR NO_X Annual Trading Program

19. The heading of subpart AAAAA of part 97 is revised to read as set forth above.

§97.402 [Amended]

20. Section 97.402 is amended by:

a. Relocating all definitions beginning with "*CSAPR*" to their alphabetical locations in the list of definitions;

b. In the definition of "*Cogeneration system*", by removing "steam turbine generator" and adding in its place "generator";

c. In the definition of "*Commence commercial operation*", in paragraph (2) introductory text, by adding after "defined in" the word "the";

d. In the definition of "*CSAPR NO_X Annual allowances held* or *hold TR NO_4 Annual allowances*", by removing "*TR NO_4*" and adding in its place "*CSAPR NO_X*";

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e. In the definition of "*CSAPR SO_2 Group 2 Trading Program*", by removing "52.39(a)" and adding in its place "§52.39(a)";

f. In the definition of "*Fossil fuel*", by removing "§§" and adding in its place §";

g. In the definition of "*Owner*", by removing the paragraph designator "3)" and adding in its place the paragraph designator "(3)"; and

h. In the definition of "*Sequential use of energy*", in paragraph (2), by adding after "from" the word "a".

§97.404 [Amended]

21. Section 97.404 is amended in paragraph (b)(2)(ii) by removing "paragraph (b)(1)(i)" and adding in its place "paragraph (b)(2)(i)".

§97.406 [Amended]

22. Section 97.406 is amended in the heading of paragraph (c)(4) by adding "CSAPR NO_X Annual" before "allowances".

§97.410 State NO_X Annual trading budgets, new unit set-asides, Indian country new unit set-asides, and variability limits.

23. Section 97.410 is amended by:

a. Revising the heading as set forth above;

b. Removing "NO_X annual trading budget" wherever it appears and adding in its place "NO_X Annual trading budget";

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c. Removing "NO_X annual new unit set-aside" wherever it appears and adding in its place "new unit set-aside";

d. Removing "NO_X annual Indian country new unit set-aside" wherever it appears and adding in its place "Indian country new unit set-aside";

e. Removing "NO_X annual variability limit" wherever it appears and adding in its place "variability limit";

f. In paragraph (a) introductory text, by removing "new unit-set aside" and adding in its place "new unit set-aside";

g. Adding and reserving paragraphs (a)(11)(vi) and (a)(16)(vi); and

h. In paragraph (c), by adding after "Each" the word "State", by removing "identified", and by removing "set aside" wherever it appears and adding in its place "set-aside".

§ 97.411 [Amended]

24. Section 97.411 is amended by:

a. In paragraphs (b)(1)(iii) and (b)(2)(iii), by adding after "November 30 of" the word "the";

b. In paragraph (c)(1)(ii), by removing "§ 52.38(a)(3), (4), or (5)" and adding in its place "§52.38(a)(4) or (5)";

c. In paragraph (c)(5)(i)(B), by adding after "§52.38(a)(4) or (5)" the words "of this chapter";

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d. In paragraph (c)(5)(ii) introductory text, by removing "of this paragraph" and adding in its place "of this section";

e. In paragraph (c)(5)(ii)(B), by adding after "§52.38(a)(4) or (5)" the words "of this chapter"; and

f. In paragraph (c)(5)(iii), by removing "of this paragraph" and adding in its place "of this section".

§ 97.412 [Amended]

25. Section 97.412 is amended by:

a. In paragraph (a)(2), by removing "§§" and adding in its place "§";

b. In paragraph (a)(4)(i), by removing "paragraph (a)(1)(i) through (iii)" and adding in its place "paragraphs (a)(1)(i) through (iii)";

c. In paragraph (a)(4)(ii), by adding after "paragraph (a)(4)(i)" the words "of this section";

d. In paragraph (a)(9)(i), by adding after "November 30 of" the word "the";

e. In paragraph (b)(4)(ii), by adding after "paragraph (b)(4)(i)" the words "of this section";

f. In paragraph (b)(9)(i), by adding after "November 30 of" the word "the"; and

g. In paragraph (b)(10)(ii), by adding after "§52.38(a)(4) or (5)" the words "of this chapter".

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§97.421 [Amended]

26. Section 97.421 is amended by:

a. In paragraphs (c), (d), and (e), by removing "period" and adding in its place "periods"; and

b. In paragraph (j), by removing "the date" and adding in its place "the date 15 days after the date".

§97.425 [Amended]

27. Section 97.425 is amended by:

a. In paragraph (b)(2)(iii) introductory text, by removing "paragraph (b)(1)(i)" and adding in its place "paragraph (b)(1)(ii)";

b. In paragraph (b)(2)(iii)(B), by adding "the calculations incorporating" before "any adjustments";

c. In paragraph (b)(4)(i), by removing "the" before "them"; and

d. In paragraph (b)(6)(iii)(B), by removing after "appropriate" the word "at".

§97.426 [Amended]

28. Section 97.426 is amended in paragraph (b) by removing "97.427, or 97.428" and adding in its place "§97.427, or §97.428".

§97.428 [Amended]

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29. Section 97.428 is amended in paragraph (b) by removing "paragraph (a)(1)" and adding in its place "paragraph (a)".

§97.430 [Amended]

30. Section 97.430 is amended by:

a. In paragraph (b) introductory text, by adding after "operator" the words "of a CSAPR NO_X Annual unit", by adding "the later of" before "the following dates" each time it appears, and by removing the final period and adding in its place a colon;

b. Removing paragraphs (b)(1) and (b)(2) introductory text;

c. Redesignating paragraphs (b)(2)(i) and (ii) as paragraphs (b)(1) and (2);

d. In redesignated paragraph (b)(2), by removing the final semicolon and adding in its place a period;

e. In paragraph (b)(3) introductory text, by removing "§§" and adding in its place "§"; and

f. In paragraph (b)(3)(iii), by adding after "§75.66" the words "of this chapter".

§97.431 [Amended]

31. Section 97.431 is amended in paragraph (d)(3) introductory text by removing "§§" and adding in its place "§".

§97.434 [Amended]

32. Section 97.434 is amended by:

a. In paragraph (b) by adding "the" before "requirements";

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b. In paragraph (d)(1) introductory text, by removing "the CSAPR" and adding in its place "a CSAPR", and by adding "the later of" before the final colon;

c. In paragraph (d)(1)(i), by removing "For a unit that commences commercial operation before July 1, 2014, the" and adding in its place "The"; and

d. In paragraph (d)(1)(ii), by removing "For a unit that commences commercial operation on or after July 1, 2014, the" and adding in its place "The", and by removing ", unless that quarter is the third or fourth quarter of 2014, in which case reporting shall commence in the quarter covering January 1, 2015 through March 31, 2015".

Subpart BBBBB—CSAPR NO_X Ozone Season Trading Program

33. The heading of subpart BBBBB of part 97 is revised to read as set forth above.

34. Section 97.502 is amended by:

a. Relocating all definitions beginning with "*CSAPR*" to their alphabetical locations in the list of definitions;

b. In the definition of "*Cogeneration system*", by removing "steam turbine generator" and adding in its place "generator";

c. In the definition of "*Commence commercial operation*", in paragraph (2) introductory text, by adding after "defined in" the word "the";

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d. Revising the definitions of "*CSAPR NO_X Ozone Season allowance*" and "*CSAPR NO_X Ozone Season emissions limitation*";

e. In the definitions of "*CSAPR SO_2 Group 1 Trading Program*" and "*CSAPR SO_2 Group 2 Trading Program*", by removing "52.39(a)" and adding in in its place "§52.39(a)";

f. In the definition of "*Fossil fuel*", by removing "§§" and adding in its place §";

g. In the definition of "*Sequential use of energy*", in paragraph (2), by adding after "from" the word "a"; and

h. Adding, in alphabetical order, a new definition of "*Tonnage equivalent*";

to read as follows:

§97.502 Definitions.

* * * * *

CSAPR NO_X Ozone Season allowance means a limited authorization under the CSAPR NO_X Ozone Season Trading Program issued and allocated or auctioned to a CSAPR NO_X Ozone Season unit in a State (or Indian country within the borders of such State) by the Administrator under this subpart, or by the State or permitting authority under a SIP revision approved by the Administrator under §52.38(b)(3), (4), or (5) of this chapter, to emit either:

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(1) One ton of NO_X in the State (or Indian country located within the borders of such State) during a control period of the specified calendar year for which the authorization is allocated or auctioned; or

(2) As determined under §97.524(f), up to one ton of NO_X in another State (or Indian country located within the borders of another State) or during a control period after the specified calendar year for which the authorization is allocated or auctioned.

* * * * *

CSAPR NO_X Ozone Season emissions limitation means, for a CSAPR NO_X Ozone Season source, the tonnage of NO_X emissions authorized in a control period in a given year by the tonnage equivalent of CSAPR NO_X Ozone Season allowances available for deduction for the source under §97.524(a) for such control period.

* * * * *

Tonnage equivalent means, with regard to a specific individual CSAPR NO_X Ozone Season allowance held or deducted for an identified purpose, the portion of one ton represented by the CSAPR NO_X Ozone Season allowance as determined under §97.524(f) or, with regard to a specific group of CSAPR NO_X Ozone Season allowances held or deducted for a common identified purpose, the

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unrounded sum of the tonnage equivalents of the individual CSAPR NO_X Ozone Season allowances comprising the group.

* * * * *

§97.504 [Amended]

35. Section 97.504 is amended in paragraph (b)(2)(ii) by removing "paragraph (b)(1)(i)" and adding in its place "paragraph (b)(2)(i)", and by removing "TR NOX" and adding in its place "CSAPR NO_X".

36. Section 97.506 is amended by:

a. Revising paragraphs (c)(1)(i), (c)(2)(i) introductory text, and (c)(2)(v)(B);

b. Redesignating paragraph (c)(3)(i) as paragraph (c)(3)(i)(A), and by revising the redesignated paragraph;

c. Adding a new paragraph (c)(3)(i)(B);

d. In the heading of paragraph (c)(4), by adding "CSAPR NO_X Ozone Season" before "allowances"; and

e. Revising paragraph (c)(6) introductory text;

to read as follows:

§97.506 Standard requirements.

* * * * *

(c) * * *

(1) * * *

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(i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_X Ozone Season source and each CSAPR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, CSAPR NO_X Ozone Season allowances available for deduction for such control period under §97.524(a) with a tonnage equivalent not less than the tons of total NO_X emissions for such control period from all CSAPR NO_X Ozone Season units at the source.

* * * * *

(2) * * *

(i) If total NO_X emissions during a control period in a given year from all CSAPR NO_X Ozone Season units at CSAPR NO_X Ozone Season sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_X emissions during such control period exceeds the common designated representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_X Ozone Season allowances available for deduction for such control period under

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§97.525(a) with a tonnage equivalent not less than two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with §97.525(b), of multiplying—

* * * * *

(v) * * *

(B) Each ton of the tonnage equivalent of CSAPR NO_X Ozone Season allowances that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act.

(3) * * *

(i)(A) Except as provided in paragraph (c)(3)(i)(B) of this section, a CSAPR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under §97.530(b) and for each control period thereafter.

(B) A CSAPR NO_X Ozone Season unit in the State of Kansas (or Indian country within the borders of the State) that is not a CSAPR NO_X Ozone Season unit in another State (or Indian country within the borders of another State) during any portion of a

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control period in 2015 or 2016 shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.530(b) and for each control period thereafter.

* * * * *

(6) Limited authorization. A CSAPR NO_X Ozone Season allowance is a limited authorization to emit up to one ton of NO_X during the control period in one year as determined under §97.524(f). Such authorization is limited in its use and duration as follows:

* * * * *

37. Section 97.510 is revised to read as follows:

§97.510 State NO_X Ozone Season trading budgets, new unit set-asides, Indian country new unit set-asides, and variability limits.

(a) The State NO_X Ozone Season trading budgets, new unit set-asides, and Indian country new unit set-asides for allocations of CSAPR NO_X Ozone Season allowances for the control periods in 2015 and thereafter are as follows:

(1) *Alabama*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 31,746 tons.

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(ii) The new unit set-aside for 2015 and 2016 is 635 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 9,979 tons.

(v) The new unit set-aside for 2017 and thereafter is 205 tons.

(vi) [Reserved]

(2) *Arkansas*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 15,110 tons.

(ii) The new unit set-aside for 2015 and 2016 is 756 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 6,949 tons.

(v) The new unit set-aside for 2017 and thereafter is 141 tons.

(vi) [Reserved]

(3) *Florida*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 28,644 tons.

(ii) The new unit set-aside for 2015 and 2016 is 544 tons.

(iii) The Indian country new unit set-aside for 2015 and 2016 is 29 tons.

(iv) [Reserved]

(v) [Reserved]

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(vi) [Reserved]

(4) *Georgia*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 27,944 tons.

(ii) The new unit set-aside for 2015 and 2016 is 559 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 24,041 tons.

(v) The new unit set-aside for 2017 and thereafter is 481 tons.

(vi) [Reserved]

(5) *Illinois*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 21,208 tons.

(ii) The new unit set-aside for 2015 and 2016 is 1,697 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 12,078 tons.

(v) The new unit set-aside for 2017 and thereafter is 591 tons.

(vi) [Reserved]

(6) *Indiana*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 46,876 tons.

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(ii) The new unit set-aside for 2015 and 2016 is 1,406 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 28,284 tons.

(v) The new unit set-aside for 2017 and thereafter is 565 tons.

(vi) [Reserved]

(7) *Iowa*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 16,532 tons.

(ii) The new unit set-aside for 2015 and 2016 is 314 tons.

(iii) The Indian country new unit set-aside for 2015 and 2016 is 17 tons.

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 8,351 tons.

(v) The new unit set-aside for 2017 and thereafter is 411 tons.

(vi) The Indian country new unit set-aside for 2017 and thereafter is 8 tons.

(8) *Kansas*. (i) [Reserved]

(ii) [Reserved]

(iii) [Reserved]

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(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 9,272 tons.

(v) The new unit set-aside for 2017 and thereafter is 272 tons.

(vi) The Indian country new unit set-aside for 2017 and thereafter is 9 tons.

(9) *Kentucky*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 36,167 tons.

(ii) The new unit set-aside for 2015 and 2016 is 1,447 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 21,519 tons.

(v) The new unit set-aside for 2017 and thereafter is 647 tons.

(vi) [Reserved]

(10) *Louisiana*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 18,115 tons.

(ii) The new unit set-aside for 2015 and 2016 is 344 tons.

(iii) The Indian country new unit set-aside for 2015 and 2016 is 18 tons.

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 15,807 tons.

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(v) The new unit set-aside for 2017 and thereafter is 612 tons.

(vi) The Indian country new unit set-aside for 2017 and thereafter is 16 tons.

(11) *Maryland*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 7,179 tons.

(ii) The new unit set-aside for 2015 and 2016 is 144 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 4,026 tons.

(v) The new unit set-aside for 2017 and thereafter is 485 tons.

(vi) [Reserved]

(12) *Michigan*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 28,041 tons.

(ii) The new unit set-aside for 2015 and 2016 is 533 tons.

(iii) The Indian country new unit set-aside for 2015 and 2016 is 28 tons.

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 19,115 tons.

(v) The new unit set-aside for 2017 and thereafter is 363 tons.

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(vi) The Indian country new unit set-aside for 2017 and thereafter is 19 tons.

(13) *Mississippi*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 12,429 tons.

(ii) The new unit set-aside for 2015 and 2016 is 237 tons.

(iii) The Indian country new unit set-aside for 2015 and 2016 is 12 tons.

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 5,910 tons.

(v) The new unit set-aside for 2017 and thereafter is 584 tons.

(vi) The Indian country new unit set-aside for 2017 and thereafter is 6 tons.

(14) *Missouri*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 22,788 tons.

(ii) The new unit set-aside for 2015 is 684 tons and for 2016 is 1,367 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 15,323 tons.

(v) The new unit set-aside for 2017 and thereafter is 314 tons.

(vi) [Reserved]

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(15) *New Jersey*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 4,128 tons.

(ii) The new unit set-aside for 2015 and 2016 is 83 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 2,015 tons.

(v) The new unit set-aside for 2017 and thereafter is 1,151 tons.

(vi) [Reserved]

(16) *New York*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 10,369 tons.

(ii) The new unit set-aside for 2015 and 2016 is 197 tons.

(iii) The Indian country new unit set-aside for 2015 and 2016 is 10 tons.

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 4,450 tons.

(v) The new unit set-aside for 2017 and thereafter is 89 tons.

(vi) The Indian country new unit set-aside for 2017 and thereafter is 4 tons.

(17) *North Carolina*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 22,168 tons.

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(ii) The new unit set-aside for 2015 and 2016 is 1,308 tons.

(iii) The Indian country new unit set-aside for 2015 and 2016 is 22 tons.

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 12,275 tons.

(v) The new unit set-aside for 2017 and thereafter is 236 tons.

(vi) The Indian country new unit set-aside for 2017 and thereafter is 12 tons.

(18) *Ohio*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 41,284 tons.

(ii) The new unit set-aside for 2015 and 2016 is 826 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 16,660 tons.

(v) The new unit set-aside for 2017 and thereafter is 337 tons.

(vi) [Reserved]

(19) *Oklahoma*. (i) The NO_X Ozone Season trading budget for 2015 is 36,567 tons and for 2016 is 22,694 tons.

(ii) The new unit set-aside for 2015 is 731 tons and for 2016 is 454 tons.

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(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 16,215 tons.

(v) The new unit set-aside for 2017 and thereafter is 309 tons.

(vi) The Indian country new unit set-aside for 2017 and thereafter is 16 tons.

(20) *Pennsylvania*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 52,201 tons.

(ii) The new unit set-aside for 2015 and 2016 is 1,044 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 14,387 tons.

(v) The new unit set-aside for 2017 and thereafter is 1,017 tons.

(vi) [Reserved]

(21) *South Carolina*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 13,909 tons.

(ii) The new unit set-aside for 2015 and 2016 is 264 tons.

(iii) The Indian country new unit set-aside for 2015 and 2016 is 14 tons.

(iv) [Reserved]

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(v) [Reserved]

(vi) [Reserved]

(22) *Tennessee*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 14,908 tons.

(ii) The new unit set-aside for 2015 and 2016 is 298 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 5,481 tons.

(v) The new unit set-aside for 2017 and thereafter is 109 tons.

(vi) [Reserved]

(23) *Texas*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 65,560 tons.

(ii) The new unit set-aside for 2015 and 2016 is 2,556 tons.

(iii) The Indian country new unit set-aside for 2015 and 2016 is 66 tons.

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 58,002 tons.

(v) The new unit set-aside for 2017 and thereafter is 2,852 tons.

(vi) The Indian country new unit set-aside for 2017 and thereafter is 58 tons.

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(24) *Virginia*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 14,452 tons.

(ii) The new unit set-aside for 2015 and 2016 is 723 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 6,818 tons.

(v) The new unit set-aside for 2017 and thereafter is 1,844 tons.

(vi) [Reserved]

(25) *West Virginia*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 25,283 tons.

(ii) The new unit set-aside for 2015 and 2016 is 1,264 tons.

(iii) [Reserved]

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 13,390 tons.

(v) The new unit set-aside for 2017 and thereafter is 268 tons.

(vi) [Reserved]

(26) *Wisconsin*. (i) The NO_X Ozone Season trading budget for 2015 and 2016 is 14,784 tons.

(ii) The new unit set-aside for 2015 and 2016 is 872 tons.

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(iii) The Indian country new unit set-aside for 2015 and 2016 is 15 tons.

(iv) The NO_X Ozone Season trading budget for 2017 and thereafter is 5,561 tons.

(v) The new unit set-aside for 2017 and thereafter is 115 tons.

(vi) The Indian country new unit set-aside for 2017 and thereafter is 6 tons.

(b) The States' variability limits for the State NO_X Ozone Season trading budgets for the control periods in 2017 and thereafter are as follows:

(1) The variability limit for Alabama is 2,096 tons.

(2) The variability limit for Arkansas is 1,459 tons.

(3) [Reserved]

(4) The variability limit for Georgia is 5,049 tons.

(5) The variability limit for Illinois is 2,536 tons.

(6) The variability limit for Indiana is 5,940 tons.

(7) The variability limit for Iowa is 1,754 tons.

(8) The variability limit for Kansas is 1,947 tons.

(9) The variability limit for Kentucky is 4,519 tons.

(10) The variability limit for Louisiana is 3,319 tons.

(11) The variability limit for Maryland is 845 tons.

(12) The variability limit for Michigan is 4,014 tons.

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(13) The variability limit for Mississippi is 1,241 tons.

(14) The variability limit for Missouri is 3,218 tons.

(15) The variability limit for New Jersey is 423 tons.

(16) The variability limit for New York is 935 tons.

(17) The variability limit for North Carolina is 2,578 tons.

(18) The variability limit for Ohio is 3,499 tons.

(19) The variability limit for Oklahoma is 3,405 tons.

(20) The variability limit for Pennsylvania is 3,021 tons.

(21) [Reserved]

(22) The variability limit for Tennessee is 1,151 tons.

(23) The variability limit for Texas is 12,180 tons.

(24) The variability limit for Virginia is 1,432 tons.

(25) The variability limit for West Virginia is 2,812 tons.

(26) The variability limit for Wisconsin is 1,168 tons.

(c) Each State NO_X Ozone Season trading budget in this section includes any tons in a new unit set-aside or Indian country new unit set-aside, but does not include any tons in a variability limit.

38. Section 97.511 is amended by:

a. In paragraphs (b)(1)(iii) and (b)(2)(iii), by adding after "August 31 of" the word "the";

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b. In paragraph (b)(2)(iv)(B), by adding a paragraph break after the end of the second sentence and before the paragraph designator "(v)" for the following paragraph (b)(2)(v);

c. In paragraph (c)(1)(ii), by removing "§52.38(b)(3), (4), or (5)" and adding in its place "§52.38(b)(4) or (5)", and by removing "January 1" and adding in its place "May 1";

d. Revising paragraph (c)(3);

e. In paragraph (c)(5)(i)(B), by adding after "§52.38(b)(4) or (5)" the words "of this chapter";

f. In paragraph (c)(5)(ii) introductory text, by removing "of this paragraph" and adding in its place "of this section";

g. In paragraph (c)(5)(ii)(B), by adding after "§52.38(b)(4) or (5)" the words "of this chapter"; and

h. In paragraph (c)(5)(iii), by removing "of this paragraph" and adding in its place "of this section";

To read as follows:

§97.511 Timing requirements for CSAPR NO_X Ozone Season allowance allocations.

* * * * *

(c) * * *

(3) If the Administrator already recorded such CSAPR NO_X Ozone Season allowances under §97.521 and if the Administrator makes the determination under paragraph (c)(1) of this section

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before making deductions for the source that includes such recipient under §97.524(b) for such control period, then the Administrator will deduct from the account in which such CSAPR NO_X Ozone Season allowances were recorded CSAPR NO_X Ozone Season allowances allocated for the same or a prior control period until the tonnage equivalent of the CSAPR NO_X Ozone Season allowances deducted under this paragraph equals or exceeds the tonnage equivalent of such already recorded CSAPR NO_X Ozone Season allowances, making all such deductions in whole CSAPR NO_X Ozone Season allowances. The authorized account representative shall ensure that there are CSAPR NO_X Ozone Season allowances in such account with a tonnage equivalent sufficient for completion of the deduction.

* * * * *

39. Section 97.512 is amended by:

a. Revising paragraph (a) introductory text;

b. In paragraph (a)(4)(i), by removing "paragraph (a)(1)(i) through (iii)" and adding in its place "paragraphs (a)(1)(i) through (iii)";

c. In paragraph (a)(2), by removing "§§" and adding in its place "§";

d. In paragraph (a)(4)(ii), by adding after "paragraph (a)(4)(i)" the words "of this section";

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e. In paragraph (a)(9)(i), by adding after "August 31 of" the word "the";

f. Revising paragraph (b) introductory text;

g. In paragraph (b)(4)(ii), by adding after "paragraph (b)(4)(i)" the words "of this section";

h. In paragraph (b)(9)(i), by adding after "August 31 of" the word "the"; and

i. In paragraph (b)(10)(ii), by adding after "§ 52.38(b)(4) or (5)" the words "of this chapter";

To read as follows:

§97.512 CSAPR NO_X Ozone Season allowance allocations to new units.

(a) For each control period in 2015 and thereafter and for the CSAPR NO_X Ozone Season units in each State for which a new unit set-aside is set forth in §97.510 for that control period, the Administrator will allocate CSAPR NO_X Ozone Season allowances to the CSAPR NO_X Ozone Season units as follows:

* * * * *

(b) For each control period in 2015 and thereafter and for the CSAPR NO_X Ozone Season units located in Indian country within the borders of each State for which an Indian country new unit set-aside is set forth in §97.510 for that control period, the

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Administrator will allocate CSAPR NO_X Ozone Season allowances to the CSAPR NO_X Ozone Season units as follows:

* * * * *

40. Section 97.521 is amended by:

a. In paragraph (b) introductory text, by removing "§52.38(b)(3)(i) through (iv)" and adding in its place "§52.38(b)(3)(i)(A) through (D)";

b. Redesignating paragraph (c) as paragraph (c)(1), and by revising the redesignated paragraph;

c. Adding a new paragraph (c)(2);

d. Revising paragraphs (d) and (e); and

e. In paragraph (j), by removing "the date" and adding in its place "the date 15 days after the date";

To read as follows:

§97.521 Recordation of CSAPR NO_X Ozone Season allowance allocations and auction results.

* * * * *

(c)(1) By December 1, 2016, the Administrator will record in each CSAPR NO_X Ozone Season source's compliance account the CSAPR NO_X Ozone Season allowances allocated to the CSAPR NO_X Ozone Season units at the source, or in each appropriate Allowance Management System account the CSAPR NO_X Ozone Season allowances auctioned to CSAPR NO_X Ozone Season units, in

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accordance with §97.511(a), or with a SIP revision approved under §52.38(b)(4) or (5) of this chapter, for the control period in 2017 or, for such sources in Georgia, the control periods in 2017 and 2018.

(2) For the CSAPR NO_X Ozone Season sources not in Georgia, by December 1, 2016, the Administrator will record in each such source's compliance account the CSAPR NO_X Ozone Season allowances allocated to the CSAPR NO_X Ozone Season units at the source in accordance with §97.511(a) for the control period in 2018, unless the State in which the source is located notifies the Administrator in writing by November 15, 2016 of the State's intent to submit to the Administrator a complete SIP revision by April 1, 2017 meeting the requirements of §52.38(b)(3)(ii)(A) through (D) of this chapter.

(A) If the State does not submit to the Administrator by April 1, 2017 such complete SIP revision, the Administrator will record by April 15, 2017 in each CSAPR NO_X Ozone Season source's compliance account the CSAPR NO_X Ozone Season allowances allocated to the CSAPR NO_X Ozone Season units at the source in accordance with §97.511(a) for the control period in 2018.

(B) If the State submits to the Administrator by April 1, 2017 and the Administrator approves by October 1, 2017 such complete SIP revision, the Administrator will record by October

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1, 2017 in each CSAPR NO_X Ozone Season source's compliance account the CSAPR NO_X Ozone Season allowances allocated to the CSAPR NO_X Ozone Season units at the source as provided in such approved, complete SIP revision for the control period in 2018.

(C) If the State submits to the Administrator by April 1, 2017 and the Administrator does not approve by October 1, 2017 such complete SIP revision, the Administrator will record by October 1, 2017 in each CSAPR NO_X Ozone Season source's compliance account the CSAPR NO_X Ozone Season allowances allocated to the CSAPR NO_X Ozone Season units at the source in accordance with §97.511(a) for the control period in 2018.

(d) By July 1, 2018, the Administrator will record in each CSAPR NO_X Ozone Season source's compliance account the CSAPR NO_X Ozone Season allowances allocated to the CSAPR NO_X Ozone Season units at the source, or in each appropriate Allowance Management System account the CSAPR NO_X Ozone Season allowances auctioned to CSAPR NO_X Ozone Season units, in accordance with §97.511(a), or with a SIP revision approved under §52.38(b)(4) or (5) of this chapter, for the control periods in 2019 and 2020.

(e) By July 1, 2019, the Administrator will record in each CSAPR NO_X Ozone Season source's compliance account the CSAPR NO_X Ozone Season allowances allocated to the CSAPR NO_X Ozone Season units at the source, or in each appropriate Allowance Management

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System account the CSAPR NO_X Ozone Season allowances auctioned to CSAPR NO_X Ozone Season units, in accordance with §97.511(a), or with a SIP revision approved under §52.38(b)(4) or (5) of this chapter, for the control periods in 2021 and 2022.

* * * * *

41. Section 97.524 is amended by:

a. Revising paragraphs (b) introductory text, (b)(1), (c)(2) introductory text, and (c)(2)(i) and (ii);

b. Adding new paragraphs (c)(2)(iii) through (v);

c. Revising paragraph (d); and

d. Adding a new paragraph (f);

To read as follows:

§97.524 Compliance with CSAPR NO_X Ozone Season emissions limitation.

* * * * *

(b) *Deductions for compliance*. After the recordation, in accordance with §97.523, of CSAPR NO_X Ozone Season allowance transfers submitted by the allowance transfer deadline for a control period in a given year, the Administrator will deduct from each source's compliance account CSAPR NO_X Ozone Season allowances available under paragraph (a) of this section in order to determine whether the source meets the CSAPR NO_X Ozone Season emissions limitation for such control period, making all

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such deductions in whole CSAPR NO_X Ozone Season allowances, as follows:

(1) Until the tonnage equivalent of the CSAPR NO_X Ozone Season allowances deducted equals or exceeds the number of tons of total NO_X emissions from all CSAPR NO_X Ozone Season units at the source for such control period; or

* * * * *

(c) * * *

(2) *Default order of deductions*. The Administrator will deduct CSAPR NO_X Ozone Season allowances under paragraph (b) or (d) of this section from the source's compliance account in accordance with a complete request under paragraph (c)(1) of this section or, in the absence of such request or in the case of identification of an insufficient amount of CSAPR NO_X Ozone Season allowances in such request, in the following order:

(i) Any CSAPR NO_X Ozone Season allowances determined under paragraph (f)(1) of this section to have a tonnage equivalent of one ton per allowance that were allocated or auctioned from the NO_X Ozone Season trading budget for the State within whose borders the source is located to the units at the source and were not transferred out of the compliance account, in the order of recordation;

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(ii) Any CSAPR NO_X Ozone Season allowances determined under paragraph (f)(1) of this section to have a tonnage equivalent of one ton per allowance that were not allocated or auctioned from the NO_X Ozone Season trading budget for the State within whose borders the source is located to any unit at the source and were transferred to and recorded in the compliance account pursuant to this subpart, in the order of recordation;

(iii) Any CSAPR NO_X Ozone Season allowances determined under paragraph (f)(2) of this section to have a tonnage equivalent of four tenths of one ton per allowance, in the order of recordation;

(iv) Any CSAPR NO_X Ozone Season allowances determined under paragraph (f)(3) of this section to have a tonnage equivalent of one fourth of one ton per allowance that were allocated or auctioned from the NO_X Ozone Season trading budget for the State within whose borders the source is located to the units at the source and were not transferred out of the compliance account, in the order of recordation; and

(v) Any CSAPR NO_X Ozone Season allowances determined under paragraph (f)(3) of this section to have a tonnage equivalent of one fourth of one ton per allowance that were not allocated or auctioned from the NO_X Ozone Season trading budget for the State within whose borders the source is located to any unit at the

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source and were transferred to and recorded in the compliance account pursuant to this subpart, in the order of recordation.

(d) *Deductions for excess emissions*. After making the deductions for compliance under paragraph (b) of this section for a control period in a year in which the CSAPR NO_X Ozone Season source has excess emissions, the Administrator will deduct from the source's compliance account CSAPR NO_X Ozone Season allowances allocated for a control period in a prior year or the control period in the year of the excess emissions or in the immediately following year, making all such deductions in whole CSAPR NO_X Ozone Season allowances, until the tonnage equivalent of the CSAPR NO_X Ozone Season allowances deducted under this paragraph equals or exceeds two times the number of tons of the source's excess emissions.

* * * * *

(f) *Tonnage equivalents of CSAPR NO_X Ozone Season allowances*. Where a determination is needed of the tonnage equivalent of a CSAPR NO_X Ozone Season allowance held or deducted under any provision of §97.506(c), §97.511(c), §97.524, §97.525, §97.527, or §97.528 relating to the holding or deduction of CSAPR NO_X Ozone Season allowances, the Administrator will make the determination as follows, provided that notwithstanding any

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such determination the CSAPR NO_X Ozone Season allowance remains subject to the limitations in §97.506(c)(6):

(1) Except as provided under paragraph (f)(2) or (f)(3) of this section, the tonnage equivalent of each CSAPR NO_X Ozone Season allowance shall be one ton per allowance.

(2) Where a CSAPR NO_X Ozone Season allowance has been allocated or auctioned for a control period in 2017 or a subsequent year from the NO_X Ozone Season trading budget for Georgia, and where the CSAPR NO_X Ozone Season allowance is held or deducted for any purpose related to emissions from a CSAPR NO_X Ozone Season unit in another State (or Indian country within the borders of another State) or for the purpose of correcting an allocation or recordation error affecting a CSAPR NO_X Ozone Season unit in another State (or Indian country within the borders of another State), the tonnage equivalent of the CSAPR NO_X Ozone Season allowance shall be four tenths of one ton per allowance.

(3) Where a CSAPR NO_X Ozone Season allowance has been allocated or auctioned for a control period in 2015 or 2016, and where the CSAPR NO_X Ozone Season allowance is held or deducted for any purpose related to emissions from a CSAPR NO_X Ozone Season unit in any State except Georgia (or Indian country within the borders of such a State) in a control period in 2017

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or a subsequent year or for the purpose of correcting an allocation or recordation error affecting a CSAPR NO_X Ozone Season unit in any State except Georgia (or Indian country within the borders of such a State) for a control period in 2017 or a subsequent year, the tonnage equivalent of the CSAPR NO_X Ozone Season allowance shall be one fourth of one ton per allowance.

(4) The Administrator will determine the year of the compliance period for which a CSAPR NO_X Ozone Season allowance was allocated or auctioned and the State from whose NO_X Ozone Season trading budget the CSAPR NO_X Ozone Season allowance was allocated or auctioned based on the records maintained in the Allowance Management System.

42. Section 97.525 is amended by:

a. Revising paragraphs (b) introductory text and (b)(2)(ii);

b. In paragraph (b)(2)(iii) introductory text, by removing "paragraph (b)(1)(i)" and adding in its place "paragraph (b)(1)(ii)";

c. In paragraph (b)(2)(iii)(B), by adding "the calculations incorporating" before "any adjustments"; and

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d. Revising paragraphs (b)(4)(i), (b)(5), (b)(6) introductory text, (b)(6)(i) and (ii), (b)(6)(iii) introductory text, and (b)(6)(iii)(A) and (B);

To read as follows:

§97.525 Compliance with CSAPR NO_X Ozone Season assurance provisions.

* * * * *

(b) *Deductions for compliance*. The Administrator will deduct CSAPR NO_X Ozone Season allowances available under paragraph (a) of this section for compliance with the CSAPR NO_X Ozone Season assurance provisions for a State for a control period in a given year in accordance with the following procedures, making all such deductions in whole CSAPR NO_X Ozone Season allowances:

* * * * *

(2) * * *

(ii) By August 1 immediately after the promulgation of such notice, the Administrator will calculate, for each such State (and Indian country within the borders of such State) and such control period and each common designated representative for such control period for a group of one or more CSAPR NO_X Ozone Season sources and units in the State (and Indian country within the borders of such State), the common designated

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representative's share of the total NO_X emissions from all CSAPR NO_X Ozone Season units at CSAPR NO_X Ozone Season sources in the State (and Indian country within the borders of such State), the common designated representative's assurance level, and the tonnage equivalent (if any) of CSAPR NO_X Ozone Season allowances that the owners and operators of such group of sources and units must hold in accordance with the calculation formula in §97.506(c)(2)(i) and will promulgate a notice of data availability of the results of these calculations.

* * * * *

(4) * * *

(i) As of midnight of November 1 immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(iii)(B) of this section, the owners and operators described in paragraph (b)(3) of this section shall hold in the assurance account established for them and for the appropriate CSAPR NO_X Ozone Season sources, CSAPR NO_X Ozone Season units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section CSAPR NO_X Ozone Season allowances, available for deduction under paragraph (a) of this section, with a total tonnage equivalent not less than the tonnage equivalent such owners and operators are required to hold with regard to such sources, units and State

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(and Indian country within the borders of such State) as calculated by the Administrator and referenced in such notice.

* * * * *

(5) After November 1 (or the date described in paragraph (b)(4)(ii) of this section) immediately after the promulgation of each notice of data availability required in paragraph (b)(2)(iii)(B) of this section and after the recordation, in accordance with §97.523, of CSAPR NO_X Ozone Season allowance transfers submitted by midnight of such date, the Administrator will determine whether the owners and operators described in paragraph (b)(3) of this section hold, in the assurance account for the appropriate CSAPR NO_X Ozone Season sources, CSAPR NO_X Ozone Season units, and State (and Indian country within the borders of such State) established under paragraph (b)(3) of this section, CSAPR NO_X Ozone Season allowances available under paragraph (a) of this section with the tonnage equivalent that the owners and operators are required to hold with regard to such sources, units, and State (and Indian country within the borders of such State) as calculated by the Administrator and referenced in the notice required in paragraph (b)(2)(iii)(B) of this section.

(6) Notwithstanding any other provision of this subpart and any revision, made by or submitted to the Administrator after

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the promulgation of the notice of data availability required in paragraph (b)(2)(iii)(B) of this section for a control period in a given year, of any data used in making the calculations referenced in such notice, the tonnage equivalents of CSAPR NO_X Ozone Season allowances that the owners and operators are required to hold in accordance with §97.506(c)(2)(i) for such control period shall continue to be such tonnage equivalents as calculated by the Administrator and referenced in such notice required in paragraph (b)(2)(iii)(B) of this section, except as follows:

(i) If any such data are revised by the Administrator as a result of a decision in or settlement of litigation concerning such data on appeal under part 78 of this chapter of such notice, or on appeal under section 307 of the Clean Air Act of a decision rendered under part 78 of this chapter on appeal of such notice, then the Administrator will use the data as so revised to recalculate the tonnage equivalents of CSAPR NO_X Ozone Season allowances that owners and operators are required to hold in accordance with the calculation formula in §97.506(c)(2)(i) for such control period with regard to the CSAPR NO_X Ozone Season sources, CSAPR NO_X Ozone Season units, and State (and Indian country within the borders of such State) involved, provided that such litigation under part 78 of this chapter, or the

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proceeding under part 78 of this chapter that resulted in the decision appealed in such litigation under section 307 of the Clean Air Act, was initiated no later than 30 days after promulgation of such notice required in paragraph (b)(2)(iii)(B) of this section.

(ii) If any such data are revised by the owners and operators of a CSAPR NO_X Ozone Season source and CSAPR NO_X Ozone Season unit whose designated representative submitted such data under paragraph (b)(2)(i) of this section, as a result of a decision in or settlement of litigation concerning such submission, then the Administrator will use the data as so revised to recalculate the tonnage equivalents of CSAPR NO_X Ozone Season allowances that owners and operators are required to hold in accordance with the calculation formula in §97.506(c)(2)(i) for such control period with regard to the CSAPR NO_X Ozone Season sources, CSAPR NO_X Ozone Season units, and State (and Indian country within the borders of such State) involved, provided that such litigation was initiated no later than 30 days after promulgation of such notice required in paragraph (b)(2)(iii)(B) of this section.

(iii) If the revised data are used to recalculate, in accordance with paragraphs (b)(6)(i) and (ii) of this section, the tonnage equivalent of CSAPR NO_X Ozone Season allowances that

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the owners and operators are required to hold for such control period with regard to the CSAPR NO_X Ozone Season sources, CSAPR NO_X Ozone Season units, and State (and Indian country within the borders of such State) involved—

(A) Where the tonnage equivalent of CSAPR NO_X Ozone Season allowances that the owners and operators are required to hold increases as a result of the use of all such revised data, the Administrator will establish a new, reasonable deadline on which the owners and operators shall hold CSAPR NO_X Ozone Season allowances with the additional tonnage equivalent in the assurance account established by the Administrator for the appropriate CSAPR NO_X Ozone Season sources, CSAPR NO_X Ozone Season units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section. The owners' and operators' failure to hold such additional tonnage equivalent, as required, before the new deadline shall not be a violation of the Clean Air Act. The owners' and operators' failure to hold such additional tonnage equivalent, as required, as of the new deadline shall be a violation of the Clean Air Act. Each ton of the tonnage equivalent of CSAPR NO_X Ozone Season allowances that the owners and operators fail to hold as required as of the new deadline, and each day in such control period, shall be a separate violation of the Clean Air Act.

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(B) For the owners and operators for which the tonnage equivalent of CSAPR NO_X Ozone Season allowances required to be held decreases as a result of the use of all such revised data, the Administrator will record, in all accounts from which CSAPR NO_X Ozone Season allowances were transferred by such owners and operators for such control period to the assurance account established by the Administrator for the appropriate CSAPR NO_X Ozone Season sources, CSAPR NO_X Ozone Season units, and State (and Indian country within the borders of such State) under paragraph (b)(3) of this section, a total amount of the CSAPR NO_X Ozone Season allowances held in such assurance account that the Administrator determines may be transferred from such assurance account without causing the tonnage equivalent of the CSAPR NO_X Ozone Season allowances held by such owners and operators in such assurance account to fall below the tonnage equivalent required to be held by such owners and operators in such assurance account, making any transfers in whole CSAPR NO_X Ozone Season allowances. If CSAPR NO_X Ozone Season allowances were transferred to such assurance account from more than one account, the tonnage equivalent of CSAPR NO_X Ozone Season allowances recorded in each such transferor account will be in proportion to the percentage of the total tonnage equivalent of

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CSAPR NO_X Ozone Season allowances transferred to such assurance account for such control period from such transferor account.

* * * * *

§97.528 [Amended]

43. Section 97.528 is amended in paragraph (b) by removing "paragraph (a)(1)" and adding in its place "paragraph (a)".

44. Section 97.530 is amended by:

a. Revising paragraphs (b) introductory text and (b)(1) through (3);

b. In paragraph (b)(4) introductory text, by removing "§§" and adding in its place "§"; and

c. In paragraph (b)(4)(iii), by adding after "§ 75.66" the words "of this chapter";

To read as follows:

§97.530 General monitoring, recordkeeping, and reporting requirements.

* * * * *

(b) *Compliance deadlines*. Except as provided in paragraph (e) of this section, the owner or operator of a CSAPR NO_X Ozone Season unit shall meet the monitoring system certification and other requirements of paragraphs (a)(1) and (2) of this section on or before the latest of the following dates and shall record, report, and quality-assure the data from the monitoring systems

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under paragraph (a)(1) of this section on and after the latest of the following dates:

(1)(i) For a unit other than a unit described in paragraph (b)(1)(ii) of this section, May 1, 2015; or

(ii) For a unit in the State of Kansas (or Indian country within the borders of the State) that is not a CSAPR NO_X Ozone Season unit in another State (or Indian country within the borders of another State) during any portion of a control period in 2015 or 2016, May 1, 2017;

(2) 180 calendar days after the date on which the unit commences commercial operation; or

(3) Where data for the unit is reported on a control period basis under §97.534(d)(2)(ii)(B), and where the compliance date under paragraph (b)(2) of this section is not in a month from May through September, May 1 immediately after the compliance date under paragraph (b)(2) of this section.

* * * * *

§97.531 [Amended]

45. Section 97.531 is amended by:

a. In paragraph (d)(3) introductory text, by removing "§§" and adding in its place "§"; and

b. Redesignating paragraphs (d)(3)(v)(A)(1) through (5) as paragraphs (d)(3)(v)(A)(*1*) through (*5*).

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46. Section 97.534 is amended by:

a. In paragraph (b), by adding "the" before "requirements";

b. Revising paragraphs (d)(1) and (2);

c. Redesignating paragraph (d)(6) as paragraph (d)(5)(ii); and

d. In paragraph (e)(3), by removing "paragraph (d)(2)(ii)" and adding in its place "paragraph (d)(2)(ii)(B)";

To read as follows:

§97.534 Recordkeeping and reporting.

* * * * *

(d) * * *

(1) The designated representative shall report the NO_X mass emissions data and heat input data for a CSAPR NO_X Ozone Season unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter indicated under paragraph (d)(2) of this section beginning with the latest of:

(i)(A) For a unit other than a unit described in paragraph (d)(1)(i)(B) of this section, the calendar quarter covering May 1, 2015 through June 30, 2015; or

(B) For a unit in the State of Kansas (or Indian country within the borders of the State) that is not a CSAPR NO_X Ozone Season unit in another State (or Indian country within the borders of another State) during any portion of a control period

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in 2015 or 2016, the calendar quarter covering May 1, 2017 through June 30, 2017;

(ii) The calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under §97.530(b); or

(iii) For a unit that reports on a control period basis under paragraph (d)(2)(ii)(B) of this section, if the calendar quarter under paragraph (d)(1)(ii) of this section does not include a month from May through September, the calendar quarter covering May 1 through June 30 immediately after the calendar quarter under paragraph (d)(1)(ii) of this section.

(2)(i) If a CSAPR NO_X Ozone Season unit is subject to the Acid Rain Program or a CSAPR NO_X Annual emissions limitation or if the owner or operator of such unit chooses to report on an annual basis under this subpart, then the designated representative shall meet the requirements of subpart H of part 75 of this chapter (concerning monitoring of NO_X mass emissions) for such unit for the entire year and report the NO_X mass emissions data and heat input data for such unit for the entire year.

(ii) If a CSAPR NO_X Ozone Season unit is not subject to the Acid Rain Program or a CSAPR NO_X Annual emissions limitation, then the designated representative shall either:

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(A) Meet the requirements of subpart H of part 75 of this chapter for such unit for the entire year and report the NO_X mass emissions data and heat input data for such unit for the entire year in accordance with paragraph (d)(2)(i) of this section; or

(B) Meet the requirements of subpart H of part 75 of this chapter (including the requirements in §75.74(c) of this chapter) for such unit for the control period and report the NO_X mass emissions data and heat input data (including the data described in §75.74(c)(6) of this chapter) for such unit only for the control period of each year.

* * * * *

Subpart CCCCC—CSAPR SO_2 Group 1 Trading Program

47. The heading of subpart CCCCC of part 97 is revised to read as set forth above.

§97.602 [Amended]

48. Section 97.602 is amended by:

a. Relocating all definitions beginning with "*CSAPR*" to their alphabetical locations in the list of definitions;

b. In the definition of "*Cogeneration system*", by removing "steam turbine generator" and adding in its place "generator";

c. In the definition of "*Commence commercial operation*", in paragraph (2) introductory text, by adding after "defined in" the word "the";

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d. In the definition of "*Fossil fuel*", by removing "§§" and adding in its place §"; and

e. In the definition of "*Sequential use of energy*", in paragraph (2), by adding after "from" the word "a".

§97.604 [Amended]

49. Section 97.604 is amended in paragraph (b)(2)(ii) by removing "paragraph (b)(1)(i)" and adding in its place "paragraph (b)(2)(i)".

§97.606 [Amended]

50. Section 97.606 is amended by:

a. In the heading of paragraph (c)(4), by adding "CSAPR SO_2 Group 1" before "allowances"; and

b. In paragraph (d)(2), by removing "subpart H" and adding in its place "subpart B".

§97.610 State SO_2 Group 1 trading budgets, new unit set-asides, Indian country new unit set-asides, and variability limits.

51. Section 97.610 is amended by:

a. Revising the heading as set forth above;

b. Removing "SO_2 trading budget" wherever it appears and adding in its place "SO_2 Group 1 trading budget";

c. Removing "SO_2 new unit set-aside" wherever it appears and adding in its place "new unit set-aside";

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d. Removing "SO_2 Indian country new unit set-aside" wherever it appears and adding in its place "Indian country new unit set-aside";

e. Removing "SO_2 variability limit" wherever it appears and adding in its place "variability limit";

f. In paragraph (a) introductory text, by adding "Group 1" before "trading budgets", and by removing "new unit-set aside" and adding in its place "new unit set-aside";

g. Adding and reserving paragraphs (a)(2)(vi) and (a)(11)(vi); and

h. In paragraph (c), by adding after "Each" the word "State", and by removing "set aside" wherever it appears and adding in its place "set-aside".

§97.611 [Amended]

52. Section 97.611 is amended by:

a. In paragraphs (b)(1)(iii) and (b)(2)(iii), by adding after "November 30 of" the word "the";

b. In paragraph (c)(1)(ii), by removing "§ 52.39(d), (e), or (f)" and adding in its place "§ 52.39(e) or (f)";

c. In paragraph (c)(5)(i)(B), by adding after "§ 52.39(e) or (f)" the words "of this chapter";

d. In paragraph (c)(5)(ii) introductory text, by removing "of this paragraph" and adding in its place "of this section";

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e. In paragraph (c)(5)(ii)(B), by adding after "§ 52.39(e) or (f)" the words "of this chapter"; and

f. In paragraph (c)(5)(iii), by removing "of this paragraph" and adding in its place "of this section".

§97.612 [Amended]

53. Section 97.612 is amended by:

a. In paragraph (a)(2), by removing "§§" and adding in its place "§";

b. In paragraph (a)(4)(i), by removing "paragraph (a)(1)(i) through (iii)" and adding in its place "paragraphs (a)(1)(i) through (iii)";

c. In paragraph (a)(4)(ii), by adding after "paragraph (a)(4)(i)" the words "of this section";

d. In paragraph (a)(9)(i), by adding after "November 30 of" the word "the";

e. In paragraph (b)(4)(ii), by adding after "paragraph (b)(4)(i)" the words "of this section";

f. In paragraph (b)(9)(i), by adding after "November 30 of" the word "the";

g. In paragraph (b)(10)(ii), by removing "§ 52.39(d), (e), or (f)" and by adding in its place "§ 52.39(e) or (f)"; and

h. In paragraph (b)(11), by adding after "paragraphs (b)(9), (10) and (12)" the words "of this section".

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§97.621 [Amended]

54. Section 97.621 is amended by:

a. In paragraphs (c), (d), and (e), by removing "period" and adding in its place "periods"';

b. In paragraphs (f) and (g), by removing "§ 52.39(e) and (f)" and adding in its place "§ 52.39(e) or (f)"; and

c. In paragraph (j), by removing "the date" and adding in its place "the date 15 days after the date".

§97.625 [Amended]

55. Section 97.625 is amended by:

a. In paragraph (b)(2)(iii) introductory text, by removing "paragraph (b)(1)(i)" and adding in its place "paragraph (b)(1)(ii)"; and

b. In paragraph (b)(2)(iii)(B), by adding "the calculations incorporating" before "any adjustments".

§97.628 [Amended]

56. Section 97.628 is amended in paragraph (b) by removing "paragraph (a)(1)" and adding in its place "paragraph (a)".

§97.630 [Amended]

57. Section 97.630 is amended by:

a. In paragraph (b) introductory text, by adding after "operator" the words "of a CSAPR SO_2 Group 1 unit", by adding "the later of" before "the following dates" each time it

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appears, and by removing the final period and adding in its place a colon;

b. Removing paragraphs (b)(1) and (b)(2) introductory text;

c. Redesignating paragraphs (b)(2)(i) and (ii) as paragraphs (b)(1) and (2);

d. In redesignated paragraph (b)(2), by removing the final semicolon and adding in its place a period;

e. In paragraph (b)(3) introductory text, by removing "§§" and adding in its place "§"; and

f. In paragraph (b)(3)(iii), by adding after "§ 75.66" the words "of this chapter".

§97.631 [Amended]

58. Section 97.631 is amended by:

a. In paragraph (d)(3) introductory text, by removing "§§" and adding in its place "§"; and

b. Redesignating paragraphs (d)(3)(v)(A)(1) through (3) as paragraphs (d)(3)(v)(A)(*1*) through (*3*).

§97.634 [Amended]

59. Section 97.634 is amended by:

a. In paragraph (b) by adding "the" before "requirements";

b. In paragraph (d)(1) introductory text, by removing "the CSAPR" and adding in its place "a CSAPR", and by adding "the later of" before the final colon;

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c. In paragraph (d)(1)(i), by removing "For a unit that commences commercial operation before July 1, 2014, the" and adding in its place "The"; and

d. In paragraph (d)(1)(ii), by removing "For a unit that commences commercial operation on or after July 1, 2014, the" and adding in its place "The", and by removing ", unless that quarter is the third or fourth quarter of 2014, in which case reporting shall commence in the quarter covering January 1, 2015 through March 31, 2015".

Subpart DDDDD—CSAPR SO_2 Group 2 Trading Program

60. The heading of subpart DDDDD of part 97 is revised to read as set forth above.

§97.702 [Amended]

61. Section 97.702 is amended by:

a. Relocating all definitions beginning with "*CSAPR*" to their alphabetical locations in the list of definitions;

b. In the definition of "*Cogeneration system*", by removing "steam turbine generator" and adding in its place "generator";

c. In the definition of "*Commence commercial operation*", in paragraph (2) introductory text, by adding after "defined in" the word "the";

d. In the definition of "*Fossil fuel*", by removing "§§" and adding in its place §"; and

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e. In the definition of "*Sequential use of energy*", in paragraph (2), by adding after "from" the word "a".

§97.704 [Amended]

62. Section 97.704 is amended in paragraph (b)(2)(ii) by removing "paragraph (b)(1)(i)" and adding in its place "paragraph (b)(2)(i)".

§97.706 [Amended]

63. Section 97.706 is amended by:

a. In the heading of paragraph (c)(4), by adding "CSAPR SO_2 Group 2" before "allowances"; and

b. In paragraph (d)(2), by removing "subpart H" and adding in its place "subpart B".

§97.710 State SO_2 Group 2 trading budgets, new unit set-asides, Indian country new unit set-asides, and variability limits.

64. Section 97.710 is amended by:

a. Revising the heading as set forth above;

b. Removing "SO_2 trading budget" wherever it appears and adding in its place "SO_2 Group 2 trading budget";

c. Removing "SO_2 new unit set-aside" wherever it appears and adding in its place "new unit set-aside";

d. Removing "SO_2 Indian country new unit set-aside" wherever it appears and adding in its place "Indian country new unit set-aside";

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e. Removing "SO_2 variability limit" wherever it appears and adding in its place "variability limit";

f. In paragraph (a) introductory text, by adding "Group 2" before "trading budgets", and by removing "new unit-set aside" and adding in its place "new unit set-aside"; and

g. In paragraph (c), by adding after "Each" the word "State", by removing "identified under" and adding in its place "in", by removing "excludes" and adding in its place "does not include", and by removing "set aside" wherever it appears and adding in its place "set-aside".

§97.711 [Amended]

65. Section 97.711 is amended by:

a. In paragraphs (b)(1)(iii) and (b)(2)(iii), by adding after "November 30 of" the word "the";

b. In paragraph (c)(1) introductory text, by adding after "approved" each time it appears the word "under";

c. In paragraph (c)(1)(ii), by removing "§ 52.39(g), (h), or (i)" and adding in its place "§ 52.39(h) or (i)";

d. In paragraph (c)(5)(i)(B), by adding after "§ 52.39(h) or (i)" the words "of this chapter";

e. In paragraph (c)(5)(ii) introductory text, by removing "of this paragraph" and adding in its place "of this section";

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f. In paragraph (c)(5)(ii)(B), by adding after "§ 52.39(h) or (i)" the words "of this chapter"; and

g. In paragraph (c)(5)(iii), by removing "of this paragraph" and adding in its place "of this section".

§97.712 [Amended]

66. Section 97.712 is amended by:

a. In paragraph (a)(2), by removing "§§" and adding in its place "§";

b. In paragraph (a)(4)(i), by removing "paragraph (a)(1)(i) through (iii)" and adding in its place "paragraphs (a)(1)(i) through (iii)";

c. In paragraph (a)(4)(ii), by adding after "paragraph (a)(4)(i)" the words "of this section";

d. In paragraph (a)(9)(i), by adding after "November 30 of" the word "the";

e. In paragraph (b)(4)(ii), by adding after "paragraph (b)(4)(i)" the words "of this section";

f. In paragraph (b)(9)(i), by adding after "November 30 of" the word "the"; and

g. In paragraph (b)(10)(ii), by removing "§ 52.39(g), (h), or (i)" and by adding in its place "§ 52.39(h) or (i)".

§97.721 [Amended]

67. Section 97.721 is amended by:

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a. In paragraphs (c), (d), and (e), by removing "period" and adding in its place "periods"';

b. In paragraphs (f) and (g), by removing "§ 52.39(h) and (i)" and adding in its place "§ 52.39(h) or (i)"; and

c. In paragraph (j), by removing "the date" and adding in its place "the date 15 days after the date", and by removing the comma before "described".

§97.725 [Amended]

68. Section 97.725 is amended by:

a. In paragraph (b)(2)(iii) introductory text, by removing "paragraph (b)(1)(i)" and adding in its place "paragraph (b)(1)(ii)";

b. In paragraph (b)(2)(iii)(B), by adding "the calculations incorporating" before "any adjustments"; and

c. In paragraph (b)(6)(iii)(B), by removing after "appropriate" the word "at".

§97.728 [Amended]

69. Section 97.728 is amended in paragraph (b) by removing "paragraph (a)(1)" and adding in its place "paragraph (a)".

§97.730 [Amended]

70. Section 97.730 is amended by:

a. In paragraph (b) introductory text, by adding after "operator" the words "of a CSAPR SO_2 Group 2 unit", by adding

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"the later of" before "the following dates" each time it appears, and by removing the final period and adding in its place a colon;

b. Removing paragraphs (b)(1) and (b)(2) introductory text;

c. Redesignating paragraphs (b)(2)(i) and (ii) as paragraphs (b)(1) and (2);

d. In redesignated paragraph (b)(2), by removing the final semicolon and adding in its place a period;

e. In paragraph (b)(3) introductory text, by removing "§§" and adding in its place "§"; and

f. In paragraph (b)(3)(iii), by adding after "§75.66" the words "of this chapter".

§97.731 [Amended]

71. Section 97.731 is amended by:

a. In paragraph (d)(3) introductory text, by removing "§§" and adding in its place "§"; and

b. Redesignating paragraphs (d)(3)(v)(A)(1) through (3) as paragraphs (d)(3)(v)(A)(*1*) through (*3*).

§97.734 [Amended]

72. Section 97.734 is amended by:

a. In paragraph (b) by adding "the" before "requirements";

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b. In paragraph (d)(1) introductory text, by removing "the CSAPR" and adding in its place "a CSAPR", and by adding "the later of" before the final colon;

c. In paragraph (d)(1)(i), by removing "For a unit that commences commercial operation before July 1, 2014, the" and adding in its place "The"; and

d. In paragraph (d)(1)(ii), by removing "For a unit that commences commercial operation on or after July 1, 2014, the" and adding in its place "The", and by removing ", unless that quarter is the third or fourth quarter of 2014, in which case reporting shall commence in the quarter covering January 1, 2015 through March 31, 2015".

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